Science

Science is a weekly, peer-reviewed journal that publishes the best original scientific research in all fields of science, plus reviews and analyses of current research and science policy. Our offices in Washington, D.C., and Cambridge, U.K., welcome submissions from all fields of science and from any source.

A more detailed Information for Contributors and multilingual versions are available at www.sciencemag.org

Competition for space in *Science* is keen, and many papers are returned without in-

depth review. Priority is given to papers that reveal novel concepts of broad interest. We are committed to the prompt evaluation and publication of submitted papers.

Categories of Signed Papers

Reports (up to ~2500 words or ~3 journal pages) present important new research results of broad significance. Reports should include an abstract, an introductory paragraph, up to four figures or tables, and a maximum of about 30 references.

Research Articles (up to ~4500 words or ~5 journal pages) are expected to present a major advance. Research articles include an abstract, an introduction, up to six figures or tables, sections with brief subheadings, and a maximum of about 40 references.

Technical Comments (up to 500 words) discuss papers published in *Science* within the previous 6 months. The authors of the original paper are given an opportunity to reply. Comments and replies are re-

viewed and edited as needed. Summaries of the discussions appear in print; full text appears online.

Science's Compass provides broadly accessible commentary by scientists and other experts. Except for letters, items in Science's Compass are commissioned by the editors, but unsolicited contributions will be considered on occasion. Letters (~300 words) discuss material published in Science in the last 6 months or issues of general interest. Letters are not acknowledged upon receipt, nor are authors generally consulted before publication. Letters are subject to editing for clarity and space. Policy Forums (up to 2000 words) present issues in science policy. Essays on Science and Society (up to 2000 words) highlight diverse views of the intersection of science and society. Books et al. (up to 1000 words) presents reviews of current books, multimedia, exhibitions, and films of interest to Science readers. Perspectives (up to 1000 words) analyze recent research developments but do not primarily discuss the author's own work. Reviews (4 journal pages, on average) describe new developments of interdisciplinary significance and highlight unresolved questions and future directions. All undergo review. They include an abstract, an introduction that outlines the main point, and brief subheadings. A maximum of 40 references is suggested.

Tech.Sight presents overviews of current techniques and reviews of newly released software and other new products.

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Manuscript Selection

Papers are assigned to an editor at *Science* who has knowledge of the field discussed in the manuscript. Most submitted papers are rated for suitability by members of the Board of Reviewing Editors (see the masthead for listing). The editors at *Science* consider this advice in selecting papers for in-depth review. Authors of papers that are not highly rated are notified promptly; within about 2 weeks. In most cases we will return only one set of original artwork. Membership in AAAS is not a factor in selection of manuscripts for publication.

Papers are reviewed in depth by two or more outside referees. It is the policy of *Science* that reviewers are anonymous. Reviewers are contacted before being sent a paper and asked to return comments within 1 week to 10 days for most papers. We are able to expedite the review process significantly for papers that require rapid assessment. Selected papers are edited to improve accuracy and clarity and to shorten, if necessary. Papers cannot be resubmitted over a disagreement on interest or relative merit. If a paper was rejected on the basis of serious reviewer error, resubmission will be considered.

Submitting a Manuscript

For most rapid processing, submit your manuscript plus the information below through our electronic submission site: www.submit2science.org. Files should be in the following formats: pdf, ps, prn, eps, doc (MSWord), or wpd (WordPerfect). See www. submit2science.org/mtsweb/directions.html for information on how to save files in these formats from many common applications.

Science can also receive manuscripts by mail. Submit a disk copy of the text and figures in the formats above and three paper copies. We can access Mac- and PC-formatted disks, Zip and Jaz disks, and CDs. Mail to Science, 1200 New York Ave., N.W., Washington, DC 20005, USA, or to AAAS Science International, Inc., Bateman House, 82-88 Hills Rd., Cambridge, CB2 1LQ, UK.

Include with your submission a cover letter containing:

• the title of the paper and a statement of its main point.

- any information needed to ensure a fair review process and to avoid potential conflicts of interest.
- names of colleagues who have reviewed the paper.

• information about the authors' professional and financial affiliations that may be perceived to have biased the presentation.

For mail submissions, also include in the cover letter:

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- a statement that none of the material has been published or is under consideration for publication elsewhere, including the Internet.
- names, contact information, and fields of interest of five potential referees.

• for investigations on humans, a statement indicating that informed consent was obtained after the nature and possible consequences of the studies were explained.

• for authors using experimental animals, a statement that the animals' care was in accordance with institutional guidelines.

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• three copies of any paper of yours or your co-authors that is in press or under consideration elsewhere that relates to the work submitted to *Science*.

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any suggested cover illustrations.

Most papers are published within about 4 to 8 weeks of acceptance; selected papers are published rapidly online within 2 weeks of acceptance in *Sciencexpress* (www.sciencexpress.org).

Conditions of Acceptance

When a paper is accepted for publication in *Science*, it is understood that:

• any reasonable request for materials and methods necessary to verify the conclusions of the experiments reported must be honored.

• archival data sets (such as sequence and structural data) must be deposited with an appropriate data bank and the identifier code should be sent to *Science* for inclusion in the published manuscript (coordinates must be released at the time of publication).

• the authors will execute a copyright transfer agreement with *Science*.

• the paper will remain a privileged document and will not be released to the press or the public before publication. If there is a need in exceptional cases to publicize data in advance of publication, the AAAS News and Information Office (202-326-6440) must be consulted.

Authorship

By submitting a manuscript, the corresponding author accepts the responsibility that all authors have agreed to be so listed and have seen and approved the manuscript, its content, and its submission to *Science*. Any changes in authorship must be approved in writing by all the original authors.

Prior Publication

Science will not consider any paper or component of a paper that has been published or is under consideration for publication elsewhere. Distribution on the Internet may be considered prior publication and may compromise the originality of the paper as a submission to *Science*.

In addition, the main findings of a paper should not have been reported in the mass media. Authors are, however, permitted to present their data at open meetings but should not overtly seek media attention. Specifically, authors should decline participation in news briefings or coverage in press releases and should refrain from giving interviews or copies of the figures or data from their presentation or from the manuscript to any reporter unless the reporter agrees to abide by Science's press embargo. If a reporter attends an author's session at a meeting and writes a story based only on the presentation, such coverage will not affect Science's consideration of the author's paper.

Manuscript Preparation

One page in the journal contains approximately 1000 words and one small figure. Use double-spacing throughout the text, tables, figure legends, and references and notes and leave margins of at least 2.5 centimeters. Electronic files should be formatted for U.S. letter paper.

Titles and subheadings should be descriptive clauses, not full sentences. The maximum length is 30 characters per line, three lines maximum for reports and research articles, and 100 characters for reviews.

Abstracts explain to the general reader why the research was done and why the results are important. The abstract should be 100 words or less, convey the paper's main point, and outline the results or conclusions.

Text starts with a brief introduction describing the paper's significance, which should be intelligible to readers in various disciplines. Technical terms should be defined. Symbols, abbreviations, and acronyms should be defined the first time they are used. All tables and figures should be cited in numerical order.

References and notes are numbered in the order in which they are cited, first through the text and then through the tables and figure legends. Each reference should have a unique number; do not combine references or embed references in notes (this is a change from previous *Science* style). Any references to unpublished data should be given a number in the text and placed, in correct sequence, in the references and notes. Do not use *op. cit.* or *ibid.* See Information for Contributors at www.sciencemag.org for examples of reference style.

Acknowledgments, including funding information, should be gathered into a brief statement at the end of the references and notes and will be edited to conform to Science style.

Tables should be included at the end of the references and should supplement, not duplicate, the text. Each table should be on a separate page with its legend double-spaced above the table. The first sentence of the legend should be a brief descriptive title. Every vertical column should have a heading consisting of a title with the unit of measure in parentheses. Units should not change within a column.

Figure legends should be double-spaced in numerical order. No single legend should be longer than one page. Nomenclature, abbreviations, symbols, and units used in a figure should match those used in the text. The figure title should be given as the first line of the legend.

Supplementary information is posted permanently on *ScienceOnline*, linked to the manuscript, and is freely available. Supplemental text (details of methods, for example), figures, and tables should be cited at the appropriate places in the text or figure or table legend and included on disk (required) and as hard copy (optional). High-resolution and enlarged images of published figures can be included as supplemental material.

Figures should be submitted electronically or on a disk with three hard copies. Allowable formats for submission are pdf, ps, eps, prn, doc, wpd. See www.submit2science.org/mtsweb/directions.html for information on preparing art in these formats. Authors of accepted manuscripts will receive more specific information about electronic submission of art for publication. Do not send irreplaceable artwork. Most figures will not be relabeled by Science and will be printed at a width of 5.5 cm (2.25 inches or 1 column) or 12.0 cm (4.75 inches or 2 columns). Some illustrations (for example, bar graphs, simple line graphs, and gels) may be reduced to a smaller width. Symbols and lettering should be large enough to be legible after reduction. Avoid wide variation in type size within a single figure. In the printed version of the figure, letters should be about 7 points (2 mm) high. We can easily include high-resolution images as supplemental material.

Graphs should be labeled on the ordinate and abscissa with the parameter or variable being measured, the units of measure, and the scale. Scales with large or small numbers should be presented as powers of 10. Definitions of symbols should usually appear in the figure legend and not in the figure. Solid or open simple symbols $(igodot, \bigcirc, \blacksquare, \Box, \blacktriangle, \triangle, \diamond, \bullet)$ and \Diamond) reduce well. Avoid the use of light lines and screen shading. Instead, use blackand-white, hatched, and cross-hatched designs for emphasis. Use heavy lines or boxes for emphasizing or marking off areas of the figure. If possible, use scale bars in place of, or in addition to, magnifications. In gels, the lanes should be numbered and identified by number in the figure legend.

Digital color art should be submitted as CMYK (Cyan, Magenta, Yellow, Black) rather than RGB (Red, Green, Blue). Composite figures should be labeled A, B, C. Authors are charged \$650 for publication of the first color figure and \$450 for each additional figure. There is an additional charge for color figures in the reprints.

Lettering in Helvetica font is preferable for figures. Use boldface type for axis labels and for the labels A, B, C in composite figures; use italic type only as it would be used in the text (for example, for variables and genes). The first letter of each entry should be uppercase; otherwise, use uppercase letters as they would be used in the text (for example, for acronyms).

Sequences may be reduced considerably, so the typeface in the original should be clear. There should be about 130 characters and spaces per line for a sequence occupying the full width of the printed page and about 84 characters and spaces per line for a sequence occupying two columns.

Units should be metric and follow SI convention.

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The DryLab is a software tool to improve isolation of compounds by modeling how they will separate as a function of changing chromatographic parameters. The power of the program lies in its ability to predict the chromatographic conditions that will yield optimal separation of compounds.

Using profiles from two or more

chromatographic elutions in which parameters such as solvent concentration or temperature are changed, DryLab examines the resolution (the measure of separation from nearby peaks) of each compound as a function of the changing variables. It then predicts how the resolution will change as conditions are altered between the endpoints of the experimental data.

Data can be entered in DryLab in three ways: (i) by manually entering retention times and areas, (ii) by pasting spreadsheetformatted information from the clipboard, and (iii) by importing from industry standard Analytical Data Interchange (ANDI) files.

If one loads separation patterns resulting from gradients of 20 and 60 minutes into the program, DryLab will draw theoretical separations of the same compounds under any possible gradients in that timespan. The plots provided by the program include a graph of theoretical resolution as a function of gradient time. One can click on a desired peak and obtain a plot of the resolution (*y* axis) of that peak as a function of the variable (*x* axis). Thus, the optimal gradient conditions for separating a peak can easily be seen. Upon dragging the arrow under the resolution plot, the predicted plot is automatically redrawn for the chosen gradient. DryLab also can predict the effects of changes in other common chromatographic parameters, such as column length, particle size, and flow rate.

The program includes several separation "modes" covering common chromatography conditions, including gradients of pH, ionic strength, temperature, and percentages of organic solvents. Users can define gradients (linear or a custom variation) and can create completely new, optimized separations.

More sophisticated predictions made by DryLab include twovariable models, in which predictions are made, on the basis of changes in two independent parameters such as solvent composition and temperature gradients. Not surprisingly, the program requires more input data to make these predictions—four or six runs, compared with two runs for single gradients.

DryLab is a useful tool for modeling and optimizing chromatographic separations. The program's rather steep price tag should be weighed against the time and materials it could save in finding an optimal set of separation conditions. A downloadable demo version can help users assess the value of the product to their own separations before making a commitment to buy.

Compugen

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TWO-DIMENSIONAL GEL ANALYSIS

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The Hunter Thin Layer Peptide Mapping Electrophoresis (HTLE) System is for highresolution two-dimensional tryptic peptide mapping and phosphoamino acid analysis. It offers several advantages over one-dimensional techniques such as re-

verse-phase high performance liquid chromatography and SDS-polyacrylamide gel analysis. HTLE is a sensitive technique that requires only a few disintegrations per minutes of metabolically labeled product. Because digests are resolved in two dimensions, it

yields important clues about the studied peptide that help reveal its composition. The technique also permits the recovery of the peptide material for secondary analyses, such as the determination of amino acid composition and sequence or determination of the presence and position



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kit can be used for evaluating the progress of phosphoprotein purification and has excellent potential for use in dephosphorylation studies. Phosphoproteins stain in-gel as green to bluegreen bands.

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LITERATURE

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POSITIONS OPEN



CHAIR DEPARTMENT OF ZOOLOGY University of Oklahoma

The Department of Zoology (website: http:// www.ou.edu/cas/zoology/) at the University of Oklahoma invites applications and nominations for Department Chair. We seek an individual who will provide leadership in a large, diverse, and growing department composed of 31 faculty members (with several open and new lines anticipated in the next three years), 13 staff, and about 50 graduate students working in a wide array of specialties. The Department also serves over 450 undergraduate zoology majors. Core areas of research emphasis exist within the broad fields of behavioral neuroscience and comparative physiology; evolution, ecology, and behavior; and molecular, cellular, and developmental biology. As an academic department, Zoology has close ties with three organized research units: the Oklahoma Biological Survey, the Sam Noble Oklahoma Museum of Natural History, and the University of Oklahoma Biological Station. In addition, many opportunities for collaborative research and instruction exist through the Department of Botany and Microbiology, the Department of Chemistry and Biochemistry, and the Noble Electron Microscopy Laboratory as well as the University of Oklahoma Health Sciences Center in nearby Oklahoma City.

We seek an integrative Scientist with an internationally recognized and active research program who is knowledgeable about current issues pertinent to the three research areas outlined above and who has significant administrative experience. Teaching duties will consist of one course per academic year. Norman (population 88,000) is a city of tree-lined

Norman (population 88,000) is a city of tree-lined streets near the Canadian River in central Oklahoma. Various natural areas are found within a 125-mile radius of Norman, including shortgrass to tallgrass prairie, Ozark to cypress forests, streams, and lakes. Norman is 20 miles from Oklahoma City (with a metropolitan area population over 1 million) and has one of the lowest costs of living of any metropolitan area in the United States.

Applicants should send statements of research interests, administrative experience, and philosophy; curriculum vitae; representative reprints; and the names, addresses, telephone numbers, and e-mail addresses of four references, at least one of whom can address the candidate's administrative skills, to: Chair, Department of Zoology Chair Search Committee, Department of Zoology, University of Oklahoma, 730 Van Vleet Oval, Room 314, Norman, Oklahoma 73019. The Search Committee will begin screening applicants on February 1, 2001, and applications will be accepted until the position is filled.

The University of Oklahoma is an Equal Opportunity/ Affirmative Action Employer. Women and minorities are strongly encouraged to apply. The University of Oklahoma has a policy of being responsive to the needs of dual-career couples.

BIOLOGIST/ASSISTANT PROFESSOR

The St. Ambrose University Department of Biology seeks a broadly trained Zoologist, preferably with an interest in invertebrates and/or animal behavior, for a tenure-track position beginning fall 2001. Teaching responsibilities include majors and nonmajors courses. Ph.D. required. We are a department of six faculty dedicated to undergraduate teaching and advising. SAU is a private, liberal arts Catholic institution of 3,000 graduate and undergraduate students and particularly welcomes candidates who desire to work in such an environment. Résumés will continue to be received until the position is filled, but screening of candidates will begin on March 1, 2001. Please send curriculum vitae and three letters of reference to: Director of Personnel, St. Ambrose University, 518 West Locust Street, Davenport, IA 52803. Women and minorities are especially encouraged to apply

POSITIONS OPEN

CHAIR

DEPARTMENT OF PHARMACOLOGY COLLEGE OF PHARMACY University of Toledo

The University of Toledo College of Pharmacy invites applications and nominations for the position of **PROFESSOR** and Chair of Pharmacology. The successful candidate is expected to establish a Doctoral program in pharmacology or related area as well as establish a nationally competitive research program within the Department.

The Department of Pharmacology seeks a leader who has demonstrated a reputation of recognized and funded research and innovation and resourcefulness in building high-quality undergraduate and graduate training programs. Experience in mentoring junior faculty, training Doctoral students, and providing leadership in graduate and professional teaching is expected. The Department currently offers instruction in the Pharm.D., four-year Bachelor's degree in pharmaceutical sciences, Master's degree programs in pharmaceutical sciences, and the Doctoral program in medicinal chemistry. The Pharmacology Department consists of 10 faculty with research interests and expertise in drug and xenobiotic metabolism, pharmacoepidemiology, toxicology, pharmacokinetics, toxicokinetics, pharmacometrics, gene-based drug therapy, and receptor-based drug design. In addition, the Department houses the Center for Applied Pharmacology, which conducts extramurally supported clinical drug development.

The Department of Pharmacology is located in the new College of Pharmacy Building, Wolfe Hall, on the University of Toledo campus in Toledo, Ohio. The Department is supported in the new facility by state-of-the-art laboratorics, animal facilities, and computer hardware. This position offers excellent opportunities for collaboration with related departments at the university, with other local institutions such as the Medical College of Ohio and Bowling Green State University, and with local business and industry.

The position is available July 1, 2001. Review of applications will begin January 15, 2001, and continue until the position is filled.

Candidates should have a Ph.D. or equivalent in pharmacology or a closely allied biomedical science. Interested applicants should submit a letter of interest, curriculum vitae, and names and addresses of three references to: Dr. Gerald P. Sherman, Search Committee Chair, Department of Pharmacology, The University of Toledo College of Pharmacology, Mail Stop 607, 2801 West Bancroft Street, Toledo, OH 43606. Use Position Control Number 112 with all correspondence. Telephone: 419-530-1918; FAX: 419-530-1909; e-mail: gsherma@ utnet.utoledo.edu.

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RESEARCH ASSOCIATE

The Pulmonary Development Laboratory at Children's Hospital, Boston, Massachusetts, seeks applications from outstanding candidates for the position of Research Associate to study lung embryogenesis, bronchopulmonary dysplasia, and pulmonary inflam-mation in premature babies. Candidates must be M.D. or M.D.-Ph.D. followed by a pediatric residency. The candidate must have at least five years of experience as a Postdoctoral Fellow in molecular genetics including gene knockout technology, cell biology, and experimental biology with research experience in studying adhesion molecules and inflammation. Successful candidates should have established outstanding research reflected by a strong publication record and demonstrated ability to function as an independent Investigator. Applications are requested to be submitted before February 1, 2001, including curriculum vitae; a detailed statement of research interests; and names, e-mail addresses, and telephone numbers of three references to: Dr. M. E. Sunday, M.D., Ph.D., Director of Pulmonary Development Laboratory, Enders 907, 320 Longwood Avenue, Boston, MA 02115.

JJTHE INSTITUTE FOR GENOMIC RESEARCH

The Institute for Genomic Research (TIGR) is a not-for-profit research institute founded in 1992. The scope of research at TIGR includes structural, functional, and comparative analysis of genomes and gene products in viruses, eubacteria, pathogenic bacteria, archaea, and eukaryotes, both plant and animal, including the mouse, the rat and the human. Additionally, bioinformatics based research projects encompass investigations into genome composition, gene-finding algorithms, sequence assembly and alignment, and modeling of protein structure. TIGR's pioneering approach to genome based analysis produced the first-ever genome sequence of a free living organism in 1995, and TIGR scientists have completed 61% of the genomes and chromosomes in the public domain, making it the world's premier center of whole genome sequencing and analysis. TIGR currently has a staff of 250 including 30 faculty. Please visit our web site at http://www.tigr.org.

A Collaborative Investigator position is available on an NHLBI-funded project to study gene expression in rodent models of human heart, lung, blood and sleep disorders using microarrays. A strong computational background, including experience with PERL, SQL, and NT and UNIX operating systems is preferred but not required. Responsibilities will include data generation, analysis, and publication of novel results as well supervision of junior laboratory personnel. Candidates should be highly self-motivated and willing to work in a team-oriented collaborative environment. Please reference job code: 1047

A Post-Doctoral Fellowship is available on an NCI-funded project to study gene expression in human colon

tumor metastasis using microarrays. A strong computational background, including experience with PERL, SQL, and NT and UNIX operating systems is preferred but not required. Responsibilities will include data generation, analysis, and publication of novel results as well supervision of junior laboratory personnel. Candidates should be highly self-motivated and willing to work in a team-oriented collaborative environment. Please reference job code: 1048

A Post-Doctoral Fellowship is available in the USDA/NSF/DOE-funded Rice Genome project. This project is focused on sequencing and annotating rice genomic DNA as part of the International Rice Genome Sequencing Project. The successful candidate will participate in the sequencing and annotating BACs from *Oryza sativa* as part of a multi-disciplined team within the Eukaryotic Genomics department. The candidate will be responsible for data analysis and leadership of other team members. Specific responsibilities will include analysis of annotation from chromosomes 3 and 10 of rice, as part of the US effort to complete the entire sequence of these chromosomes. Other responsibilities will be further anlaysis of the annotation results including incorporation of the rice genome sequence data with orthologous sequences from other plant species such as maize, wheat, barley, and Arabidopsis. For more information about this project please visit http://www.tigr.org/tdb/rice Please reference job code: 1049

A Post-Doctoral Fellowship is available on NIAID/DARPA-funded projects to completely sequence and annotate the genomes of the pathogenic bacteria Brucella suis and Coxiella burnetii. The successful candidate will play important roles in helping to oversee closure of these genomes and in annotation and analysis of the resulting data. Additionally, the candidate will be responsible for undertaking comparative genomic analyses, particularly of factors involved in virulence and pathogenicity. A background in molecular microbiology and/or bioinformatics is preferred. Computational experience with PERL, SQL, and NT and UNIX operating systems would be useful, but is not required. Please reference job code: 1050

A position is available to participate in two NIH-funded protozoan parasite (*Trypanosoma brucei* and *Trypanosoma cruzi*) genome sequencing and analysis projects. Experience working with existing bioinformatics tools and knowledge of relational databases and proficiency in PERL are desirable. For more information, visit http://www.tigr.org/tdb/mdb/tbdb and http:// www.tigr.org/tdb/mdb/tcdb Please reference job code: 1051

Bioinformatics Analyst: Support for Annotation of the Complete Arabidopsis Genome. Responsibilities will include: interpreting complex biological information such as Blast probabilities, HMM searches, paralogous families, and gene finders; preparing data for utilization by other scientists and performing tasks to reduce and consolidate output from software. Additionally, the candidate will be responsible for recognizing and reporting problems with the data management process and fixing the problems whenever possible and presenting results of genome sequence analyses at meetings, conferences, and on the web. Bachelor or Master's degree in the biological sciences required, preferably with experience in plant science. Familiarity working with computers in the field of biological sciences performing duties similar to the above. Experience using Sybase or other relational databases, the SQL language, Unix and programming tools preferred but not required. **Please reference job code: 1052**

Qualified candidates for Collaborative Investigator and Post-Doctoral Fellowships will have a PhD in Cancer Genetics, Human Molecular Biology, Genetics, Molecular Biology or a related field or the equivalent, experience with standard molecular biology laboratory techniques. Please send a curriculum vitae with the names, phone numbers, and e-mail addresses of three references to: The Institute for Genomic Research, Attn: Human Resources, 9712 Medical Center Drive Rockville, MD 20850 E-mail: jobs@tigr.org Fax: (301) 838-0208 EOE

Sr. Vice President of Bioinformatics, Pharmacopeia

Through its world-class employees, Pharmacopeia provides experimental, computational, and informatics products to accelerate the design, discovery and development of new pharmaceuticals and chemicals. Pharmacopeia employs approximately 700 people, generates annual revenues in excess of \$100 million and is headquartered in Princeton, NJ. Major regional operations are in San Diego, CA, Cambridge, UK, and Tokyo, Japan.

Reporting to Executive Vice-President of Software Operations, this key individual will direct the technical leadership activities of Pharmacopeia, inclusive of all its wholly owned subsidiaries related to bioinformatics research and development. Due to Pharmacopeia's recent acquisition of the Genetics Computer Group, we are looking for a Senior Vice President of Bioinformatics to lead our bioinformatics initiative. This individual will manage a large, distributed professional staff and will lead them in providing support and enhance the bioinformatics environment used by scientists for target identification and drug discovery through identification, implementation, integration, and development of bioinformatic software packages. Additionally, this position will be responsible for proactively identifying new trends and technologies in bioinformatics for possible application within the company as well as for Pharmacopeia's key relationships. This position will be located at our Madison, Wisconsin facility.

EXPERIENCE/QUALIFICATIONS:

- Ph.D. in Bioinformatics, Molecular Biology, Biology, Pharmacology, Computational Chemistry, or Molecular Modeling.
- 10+ years experience in bioinformatics/computational genomics/functional genomics/sequence analysis/ including algorithm and software development, as well as database design and implementation. Or equivalent qualifications.
- 7+ years experience successfully managing a technology department in a biotechnology or pharmaceutical organization.
- Experience in being able to communicate, champion, and promote a technological vision.
- Superior interpersonal, management, and communication skills a must.
- Flexible, dynamic, charismatic personality with a high tolerance for airline food.
- Prior experience managing at the minimum 20+ scientists/technical staff.
- Excellent track record of scientific publications.

Should you be interested, please contact me, Zach Stapleton at Pharmacopeia/Molecular Simulations Inc., Corporate Recruiter, 1-888-249-2284 X-5430 or email: zach@msi.com

www.pcop.com



strong background in tern and molecular biological techniques, as reflected by a track record of productivity and peer-reviewed publications, and have worked in the field of angiogenesis. Qualified M.D., M.D./Ph.D., and Ph.D. candidates should send a letter of interest and curriculum vitae, including JOB CODE to: Andrew M. Davidoff, M.D., Division of Experimental Hematology/Surgery, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105 or E-mail to andrew.davidoff@stjude.org EOE M/F/D/V.

www.stjude.org

www.msi.com

University of Massachusetts Medical School Tenure Track Assistant Professor Gastrointestinal Cancer

The Department of Medicine at the University of Massachusetts Medical School is recruiting individuals at the level of Assistant Professor on the tenure track. We are seeking to recruit a number of outstanding scientists working in the area of gastrointestinal cancer, and will consider both M.D.'s and Ph.D.'s with relevant post-doctoral research experience. Candidates with research interests in the areas of molecular genetics, cell biology, developmental biology, genomics or mouse models are especially encouraged to apply. Appropriate areas of study include stomach cancer, colon cancer, pancreatic, esophageal or liver cancer. The appointee will hold appointments in both the Gastroenterology Division as well as the Cancer Center at UMass. We are committed to a major expansion of these divisions in a new state-of-the-art 365,000 sq. ft. research building (to be opened August, 2001). The appointees will be expected to lead a vigorous independent research program and to participate effectively in undergraduate and graduate instructional activities. Applications may be submitted at any time, but appointments may begin as early as September, 2001. Submit curriculum vitae, a list of publications, a short synopsis of research plans, and at least three letters of reference from scientists. These materials should be sent to:



Timothy C. Wang, Chief, Gastroenterology Division, Department of Medicine, University of Massachusetts Medical School, Biotech II, Suite 210, 373 Plantation Street, Worcester, MA 01605.

The University of Massachusetts is an equal opportunity, affirmative action employer and applications from individuals of all minority groups are actively encouraged.



B.S. / M.S. / Ph.D.

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454 Corporation wants to speak with you. While we have kept things quiet, we are a well-funded, pre-IPO company that is developing technology that will revolutionize the world's ability to understand genomes. 454 Corporation is a majority-owned subsidiary of CuraGen Corporation, a leading genomics-based drug discovery and development company. If you are very quantitative, highly organized, and have a proven track record of developing instrumentation, molecular biology, biochemical, or analytical methods we would like to invite you to join our rapidly growing team.

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- > Molecular Biology, Biochemistry, Surface Chemistry and Analytical Chemistry
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Applicants are encouraged to include a publication that demonstrates their participation in the development of methods or instrumentation.

Please send by fax or email a cover letter, CV/resume, and 3 letters of recommendation to:

454 Corporation

Human Resources Department Email: <u>454@curagen.com</u> Dept. 103 555 Long Wharf Drive New Haven, CT 06511 <u>www.454.com</u> Phone: 1-888- GENOMICS Fax: 203-401-3337 454 Corporation is an Equal Opportunity Employer

UCSF

Director, Ernest Gallo Clinic and Research Center



The University of California, San Francisco (UCSF) is seeking candidates for the directorship of the Ernest Gallo Clinic and Research Center. This is a major leadership position at UCSF. The Gallo Center is a multidisciplinary research organization affiliated with UCSF and dedicated to understanding alcoholism, substance abuse and addiction and developing effective pharmacological treatments for these conditions. The Center is currently comprised of 16 principal investigators and is located in a free-standing 77,000 asf facility (website: www.egcrc.org). Extensive core resources exist that support programs in genetics, cell and molecular biology, neurophysiology, behavioral neuroscience, and drug development. A primary appointment as Professor in the Department of Neurology is anticipated, with a joint appointment in the appropriate department, institute or program. The Director is the senior policy, strategic planning and operating official as well as a principal public spokesperson of the Center. Outstanding and internationally recognized biomedical scientists with distinguished track records in addiction research or related disciplines will be considered. The successful candidate must be capable of leading a diverse group of talented scientists committed to achieving a common goal of great importance. Please send curriculum vitae, a statement of research interests and the names of three references to: Greta Boesel, Special Assistant to Stanley B. Prusiner, Professor of Neurology and Chairman of the EGCRC Scientific Advisory Board, University of California, School of Medicine, 513 Parnassus Avenue, San Francisco, CA 94143-0518. UCSF and the Gallo Center are affirmative action/equal opportunity employers. The University and the Gallo Center undertake affirmative action to assure equal employment opportunity for underutilized minorities and women, for persons with disabilities and for Vietnam-era veterans and special disabled veterans.



Faculty Position Cardiac Systems Biology and Bioengineering University of California, San Diego

The Schools of Engineering and Medicine at the University of California, San Diego invite applications for a Tenure or Tenure-Track Faculty Position from individuals with expertise in systems engineering analysis of the molecular basis of heart diseases. The successful applicant will be expected to establish a vigorous program of innovative research that complements existing research activities in the Departments of Bioengineering and Medicine. These activities include research in molecular cardiology, systems biology, bioinformatics, cellular and tissue engineering, molecular biomechanics and biophysics, as well as related areas. The successful applicant will have a joint appointment between the Department of Bioengineering and the School of Medicine with apportioned responsibilities, including teaching biomedical engineering courses at the undergraduate and graduate levels. The successful applicant will be expected to continue and enhance collaborations between the engineering and medical schools at UCSD. Salary is commensurate with qualifications based upon UC pay schedules.

Please send a complete biography, samples of publications, and the names of five references to: Andrew D. McCulloch, Ph.D., Search Committee Chair, Department of Bioengineering, University of California San Diego, La Jolla, CA 92093-0412 or by email to amcculloch@ucsd.edu. Consideration of applicants will begin on January 29, 2001 and continue until the position is filled.

The University of California San Diego is an Affirmative Action/ Equal Opportunity Employer.



Aventis Pasteur



Committed to Protecting Life

As part of its Research strategy in the development of new vaccines against infectious diseases and cancer, **Aventis Pasteur** is inviting applications for full-time positions in the area of

Computational Genomics. Candidates are invited to join Aventis Pasteur's Integrated Genomics Group, located in Toronto, Canada, to work with bioinformaticians and other scientists in an interdisciplinary team environment, analyzing and integrating data from genomic sequence analyses and proteome and gene expression studies. Computational biologists with good interpersonal skills, and a desire to participate in an enthusiastic team environment are encouraged to apply. Aventis Pasteur has requirements in the following areas:

Genomic Database Developer

The successful candidate will have proven ability in the design and development of relational databases, skills in more than one common programming language and a basic understanding of the general domains in biological science. The candidate will work within a multidisciplinary team of bioinformaticians, microbiologists, immunologists and mclecular biologists to develop novel database structures that will support integrated data management, analysis and data mining of gene expression/microarray and proteomics data. Experience with CASE tools, data modeling, UML and development experience in Oracle would be an asset.

Genomic Data Mining Scientists

Positions commensurate with experience are available to bioinformaticians to assist and lead in the analysis and interpretation of genomic sequences and gene expression data. An appropriate combination of skill sets and experience in any of the following areas will be an asset:

- Machine learning approaches such as neural nets, Markov models and other pattern recognition methods,
- Human genome analysis, including EST analysis, tissue EST mining, immunogenetics,
- Mathematical data modeling, statistical analysis, clustering techniques.

Biological Systems Analysis Scientist

The successful candidate will use their computational and mathematical skills to integrate data from multiple genomic technology streams in the context of gene expression and biological pathway reconstruction. An understanding of biochemical pathways, and genetic and regulatory signalling mechanisms is a requirement. Experience with immunological or microbial systems would be an asset.

Aventis Pasteur offers a competitive compensation and benefits package.

Please forward your resume, stating position of interest, before January 26, 2001, to: Aventis Pasteur, Attn.: Human Resources Dept., 1755 Steeles Avenue West, Toronto, ON, M2R 3T4. Fax: (416) 667-2252. E-mail: recruiting.canada@aventis.com www.aventispasteur.com

Aventis Pasteur is the vaccine division of Aventis, a world leader in life sciences. For over 85 years, Aventis Pasteur has protected Canadians against preventable disease. This remains our central mandate. Aventis Pasteur is Canada's premier vaccine company, manufacturing or distributing 30 vaccines and immunotherapeutic products, which protect against 17 infectious diseases and common illnesses. Aventis Pasteur is at the forefront of innovation in vaccine technology, investing almost 40 cents of every sales dollar into Research and Development in Canada. As Canada's largest vaccine company, Aventis Pasteur employs 1000 people at its fully integrated facility in Toronto.

Thank you in advance for your interest. Only those candidates selected for interviews will be contacted.

Equal Opportunity Employer



(1 Position in Gaithersburg, MD) The successful candidates will be involved in the design and **SANDOSTATIN®** development of scientific web database applications in close collaboration with scientists. Minimum Requirements: College education with scientists. Minimum Requirements: College education and experience with Java, Perl, SQL, Oracle, PL/SQL, C and CGI. A background in research and genetics is desired. Experience with Oracle Application Server is a plus. (Requisition #JB8851). DOAN'S® Senior Scientist (1 Position in Gaithersburg, MD) The successful candidate will be part of a team that analyzes, annotates and organizes expression data from research projects and prepares it for patents and publications. Minimum Requirements: Ph.D. in cell biology, biochemistry **FEMARA®** or a related field. Experience in gene expression profiling and patent writing is a plus. (Requisition #MBG8872) Assistant Scientists (7 Positions in Gaithersburg, MD) The successful candidates will be involved in high throughput genotyping and gene expression profiling, positional cloning of complex disease genes and mutation analysis of candidate genes. Technologies used include general molecular genetics protocols, DNA/RNA extraction, PCR, sequencing and cloning, microarray analysis. Minimum Requirements: B.S. HABITROL® in Molecular Biology, or related field. Candidates should have excellent organizational skills, be efficient and dependable. Ability to adapt to new technologies and to work in a high LAMISIL® throughput and challenging environment is essential. (Requisition #MBG8865). **Clinical Research Scientist or Senior CRS** (2 Positions in East Hanover, NJ) EX-LAX® The successful candidates will assist the Executive Director of Clinical Pharmacogenetics in implementing Pharmacogenetics studies in Novartis' clinical trials world-wide. Responsibilities will include working directly with clinical teams to design pharmacogenetics clinical studies, **AREDIA**® prepare informed consent documents/protocols, coordinate facilitate regulatory committee approvals, and participate in data analysis. Minimum Requirements: college education and experience directly working with investigators on the design, implementation, completion and analysis of clinical trial data in a pharmaceutical company. A background in research and genetics is desired. Availability to assume the position before January 1, 2001 is preferred. (Requisition #KP8783) MAALOX® Please e-mail your resume as a "Microsoft Word" attachment to rd@recruitmentsolutions.com including in your e-mail message the following information: 1. In the subject area, and in the main body of your e-mail, for corting TAVIST-D® reference the requisition # (4 digit req. number) for sorting purposes. 2. Indicate current salary, broken down by base/bonus etc. in your e-mail note. LESCOL® Indicate desired salary if applicable. 4. In a brief note or cover letter, indicate where core competencies align with requisition. tencies align with requisition. As an alternate method of submission, you may fax your resume and cover letter to: (800) 343-8850. Indicate requisition number on your resume and coversheet. We are an equal opportunity employer M/F/D/V. We appreciate your interest in the substantiate of the substantiate set of the THERAFLU® our company. Unfortunately, we will only be able to respond to those candidates chosen for interviews or additional follow-up.



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Beckman Coulter, Inc., a \$1.8 billion worldwide leader in biomedical instrumentation has an excellent opportunity for a Senior Scientist for Immunoassay Development.

We are seeking an experienced scientist with demonstrated skills in developing immunochemical reagents and performing immunoassays. The selected candidate will be responsible for developing reagents for automation of immunoassays on robotic platforms for total automated solutions. This requires the conjugation of detector molecules such as fluorophores and enzymes to antibodies and immobilization of antibodies to solid surfaces.

This position requires a Ph.D. in Chemistry or Biology and a minimum of 2 years of experience in immunoassay development and optimization. Excellent interpersonal and communication skills are required. Candidates must also possess good documentation and computer proficiency. Industry experience in assay development is desirable, but not essential.

Resumes can be forwarded to: Beckman Coulter, Inc., e-mail: **breahr@beckman.com** or fax to (714) 961-4113 or P 0 Box 8000, Brea, CA 92822-8000.



VICE PRESIDENT, INFORMATION TECHNOLOGIES

Fox Chase Cancer Center, located in Philadelphia, PA, is one of the nation's 37 comprehensive cancer centers as designated by the National Cancer Institute. The Center ranks tenth nationally in peer-reviewed grant funding for cancer-related research, and pursues a broad-based program of basic, clinical and translational research, cancer prevention and treatment, and work in behavioral science and epidemiology. It has a staff of approximately 2000, organized into three divisions, Medical Science, Basic Science and Population Science.

The Trustees and Executive Leadership of the Center are committed to the further development of an integrated approach to IT throughout our institution, and are seeking a Vice President for Information Technology. Reporting to the Office of the President, the Vice President will be responsible for all planning, service delivery, systems development, external outlook, and innovation in Centerwide IT. The Vice President for IT will organize, manage, and expand resources for efficiency and maximum impact on the Center's mission. The VP will be more than reactive; s/he will be anticipatory, charged with ensuring that the computational environment is optimal for the research and clinical functions of the Center, frequently adding expertise and direction to grant proposals and ongoing research.

The Vice President will have the responsibility for developing an appropriate management structure, responsive to individual and divisional needs, and will work closely with Center staff interested in emerging IT-intensive technologies, such as bioinformatics, filmless radiology, advanced medical imaging, microarrays, automatic sequencing, and distributed medical records.

Candidates must have interest in Basic-, Medical-, and Population Science Information Technology and a demonstrated ability to work well in a high powered and complex environment. They must have managed several departments, and show steadily increasing responsibility in their field. Solid knowledge of the current state of bioinformatics, and a Ph.D., MD, or the equivalent experience are required.

Interested candidates should send Curriculum Vitae in confidence to: Michael Luskin, Michael Luskin Associates, Sugartown Mews J400, Devon, PA 19333. Fox Chase Cancer Center is an equal opportunity/affirmative action employer



Harvard University

VERIRI

DEPARTMENT OF EARTH & PLANETARY SCIENCES

The Department of Earth & Planetary Sciences at Harvard University seeks to fill two or more faculty positions at the Assistant or Associate Professor level (untenured). Candidates from all fields of earth sciences including atmospheric sciences, oceanography, geobiology, geochemistry, geophysics, geology, and planetary sciences are encouraged to apply.

Applicants should send a statement of research interests, curriculum vitae, and the names of three references to:

Professor Jeremy Bloxham, Chair Department of Earth & Planetary Sciences Harvard University 20 Oxford Street Cambridge, MA 02138 USA

We will begin reviewing applications on December 1st. We particularly encourage applications from women and minorities. Harvard University is an Affirmative Action/Equal Opportunity Employer. For more information about the department, you may visit our web site at www.eps.harvard.edu.

Associate Director Ohio Agricultural Research and Development Center The Ohio State University

The Ohio State University seeks nominations/applications for the position of Associate Director, Ohio Agricultural Research and Development Center (OARDC). The Associate Director, as a partner with the Director, is responsible for all OARDC research activities funded by federal, state and non-government sources and provides leadership to the service department heads on the Wooster campus. The OARDC (www.oardc.ohio-state.edu), the agricultural experiment station for Ohio, has a budget in excess of \$50 million per year with over 260 scientists and over 400 staff in eight academic departments in the College of Food, Agricultural, and Environmental Sciences, three in the College of Human Ecology, one in the College of Biological Sciences and one in the College of Veterinary Medicine. The person selected must qualify for a tenured faculty appointment at the rank of Professor in one of the academic departments within these four colleges. Research productivity and accomplishments as evidenced by publications in refereed scientific journals and success in securing extramural funding are essential. Preference will be given to candidates with demonstrated experience and ability in administration in a land-grant university system. Salary is negotiable.

Appointment to be effective on or after July 1, 2001. Applications received by February 1 are assured of consideration. Send a letter of application and resume or nominations or inquiries to: John Allred, OARDC/The Ohio State University, 116 Ag. Admin., 2120 Fyffe Rd., Columbus, Ohio 43210 or by email to allred.3@osu.edu. For additional details, visit www.oardc.ohio-state.edu/centernet/ adposition.htm.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, Minorities, Vietnam-Era Veterans, Disabled Veterans and Individuals with Disabilities are encouraged to apply.

HEAD: INDUSTRIAL AND CORPORATE PROGRAMS DEPARTMENT

The Office of Naval Research (ONR) is seeking an outstanding individual to serve in this Civil Service position in the Senior Executive Service (SES). Salary range is \$115,811 to \$130,200 per year, depending on qualifications. In addition to salary, career SES appointees are eligible to compete for performance awards and bonuses. Filling of this position is subject to position allocation availability.

The Head of the Industrial and Corporate Programs Department provides leadership and broad direction to plans and ensures the execution of the programs of the Department as carried out by the ONR Detachment for Industrial and Corporate Programs. the Head of the Department is responsible for ONR's programs to increase industry participation in Department of the Navy (DON) Science and Technology (S&T), for DON responsibilities in statutory and Defense-wide programs to effect the revolution in military affairs, and for education programs to maintain the pipeline and diversity of future scientists and engineers. Specifically, the department is DON's office for Manufacturing Technology (MANTECH), Small Business Innovative Research/Technology Transfer (SBIR/STTR), Dual-Use Science and Technology (DUST), Defense Technology Transfer, University Research Initiative (URI), Historically Black Colleges/Universities/Minority Institutions (HBCU/MI), industrial outreach, product innovation and business planning for S&T, and DON S&T educational programs.

For detailed information on qualifications and how to apply, applicants may download a copy of Announcement #ONR-00-0017 from the either the Department of the Navy's Human Resources web site http://www.donhr.navy.mil, ONR's web site http://www.onr.navy.mil/hr or the Office of Personnel Management's USA Jobs web site http://www.usajobs.opm.gov. Applications must be in the HRSC Office by COB 16 February 2001. For technical information concerning this position, applicants may contact Mr. David Rossi at (703) 696-4448.

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ASSISTANT PROFESSOR POSITIONS as BIRCWH SCHOLARS

(Building Interdisciplinary Research Careers in Women's Health)

New Jersey Medical School, Department of Obstetrics, Gynecology & Women's Health has unique Assistant Professor (tenure-track) positions available for individuals interested in research applicable to women's health. Our NIH funded BIRCWH Career Development Center at New Jersey Medical School in Newark, NJ, provides an excellent opportunity for young physicians, fully trained in any discipline, to acquire the skills and experience during protected time (at least 75%) required to become an independently funded investigator in women's health.

The Assistant Professor Scholar can spend up to 5 years in this training environment under the supervision of an established, well funded senior investigator, selected by the Scholar, who will function as the Scholar's Mentor. Training in clinical research, basic science research, transitional research and epidemiological research are available with some of the nation's most expert scientists and clinical investigators. Additional advanced degrees can be obtained during the course of the program. Women and underrepresented minority individuals are encouraged to apply.

For additional information contact the BIRCWH Program Director: Dr. Laura T. Goldsmith, Professor, Department of Obstetrics, Gynecology & Women's Health, New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103. Phone: 973-972-5516. Fax: 973-972-4574. E-mail: goldsmit@umdnj.edu



UMDNJ, New Jersey Medical School is an Equal Opportunity, Affirmative Action Employer,

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If you are challenged by the possibilities of changing the world with great care...inspired by the opportunities of this challenge...desire to be part of an innovative premier healthcare company that celebrates your successes as well as our own...then, you have *found it at Bayer*. Right now, we have the following exceptional opportunities available within our Pharmaceutical Division headquartered in **West Haven, CT.**

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You will be responsible for developing and implementing a scientific communication strategy for one or more drug products or therapeutic areas to achieve Bayer's US and international marketing and sales objectives. You will communicate scientific and clinical data to the medical community by writing and supervising the creation of articles for the medical literature, presentations for national conferences, slide kits, and other educational material. A strong scientific/medical background, a Ph.D., MD, or PharmD in a scientific/medical discipline, plus a minimum of five years of experience in a related scientific/medical/pharmaceutical area required. A minimum of four years of experience must include medical writing. Demonstrated ability to interpret and present scientific and clinical trial data, and excellent editorial and interpersonal skills essential. ASMW0866

Scientific Editor

You will support the Associate and Assistant Directors by writing and editing scientific articles, poster and slide presentations for national conferences, and other educational materials. You will perform literature searches, track project development, revise publications based on critical review and interface with medical publishers and opinion leaders. Requires a strong scientific background, a Ph.D. or PharmD in a scientific/medical discipline, plus a minimum of 3 years experience in a related scientific/medical/pharmaceutical area, at least two of which must include medical publishing, or a Master's degree plus a minimum of five years of experience in a related scientific/medical/ pharmaceutical area, at least two years in medical publishing or equivalent education and experience required. **ASMW0910**

Find it for yourself at **www.founditatbayer.com** Forward your resume and salary requirements, clearly referencing **Job Code** to: **Bayer Corporation, Pharmaceutical Division, P.O. Box 3238, Scranton, PA 18505-0238. Fax: 1-888-805-7474; email: bayerpharma@alexus.com** No agencies or phone calls please. We are an Equal Opportunity Employer M/F/D/V. Bayer Corporation is committed to enhancing and maintaining cultural diversity within our work environment.



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Center for Genomic Research Harvard University

Senior Computational Biologist

The Center for Genomic Research (CGR) seeks a highly motivated individual to be responsible for the development of an integrated bioinformatics and computational biology facility that would serve the research community and lead the development of innovative collaborations between computational biology and other genomic science in the CGR and would aid the integration of the different disciplines. This individual would manage a team of people for the bioinformatics facility and actively participate in forming the scientific and research direction of the CGR as a whole. It is envisaged that this facility will provide training and expertise to the research community. The position requires a PhD in bioinformatics or biology with demonstrable computational skills or a Ph.D. in computer science with a strong interest in biology; familiarity with, and development of, genome-based computational tools in biology; experience in initiating interdisciplinary collaborations; demonstrated experience in the use of bioinformatics tools for sequence, domain, structural analysis and prediction, including molecular modeling software: and expression data analysis. Experience with a procedural language, Perl preferred; and experience in one object-oriented language desirable, Java preferred. Some of the following would be desirable: understanding of basic probability theory, cluster analysis, experience with Bayesian or classical statistics, matrix algebra, information theory, graph theory, and algorithm development. Experience with relational databases and SQL helpful. Applicants should send a curriculum vitae, research summary, and arrange to have three letters of reference sent to The Center for Genomic Research, Harvard University, 16 Divinity Avenue, Cambridge, MA 02138.

> Harvard University is an Equal Opportunity/ Affirmative Action Employer

University of Vermont College of Medicine Director for Clinical Chemistry

The Department of Pathology and Laboratory Medicine at the University of Vermont/Fletcher Allen Health Care is seeking applications for the position of Medical Director of Clinical Chemistry at the Assistant or Associate Professor level. The position is offered on a tenured or clinical track depending on the applicant's qualifications. Major commitments of this position are to clinical service and teaching. Clinical investigation/research is expected and basic research is encouraged. The department has an integrated AP/CP residency training program, and residents, student fellows and clinical-year medical students rotate in the various divisions of AP and CP. Requirements are an MD or MD/Ph.D. degree and AP/CP or CP (ABP) Board Certification. Subspecialty certification is expected within three years of employment. Additional training and or experience in medical informatics is preferred but not required. Vermont licensure is required. Employment date is July 1, 2001. Applications will be accepted until April 1, 2001.

Please send curriculum vitae and four references to: Barbara H. Tindle, M.D. Director of Clinical Pathology Fletcher Allen Health Care MCHV Campus, Patrick 229 111 Colchester Avenue Burlington, VT 05401

Applications are encouraged from women and individuals of diverse racial, ethnic, and cultural backgrounds. The University of Vermont and Fletcher Allen Health Care are Equal Opportunity/Affirmative Action Employers.

Department of Pharmacology University of Minnesota Medical School Assistant Professor - Tenure Track

The Department of Pharmacology (website: www.pharmacology.med.umn.edu) at the University of Minnesota Medical School invites applications for a tenure track appointment at the rank of Assistant Professor. Requirements for the position include a Ph.D. degree in pharmacology or some other basic medical science, or an M.D. degree, and at least 2 years of post-doctoral research experience. Applicants must have a strong record of research accomplishments, as documented by publications in leading peer-reviewed journals. Successful candidates will be expected to develop an innovative, internationally competitive research program supported by extramural funding, and to participate in teaching undergraduate, graduate and medical courses in pharmacology. Applicants using cellular, molecular, genetic or biophysical techniques to study problems relevant to pharmacological sciences are encouraged to apply.

Interested candidates should send their curriculum vitae, reprints of important publications, a brief statement of research plans and the names of three references to:

Ping-Yee Law Search Committee Chair Department of Pharmacology University of Minnesota 6-120 Jackson Hall 321 Church Street SE Minneapolis, MN 55455-0217

Review of applications will begin February 8, 2001. The position will remain open until filled.

University of Minnesota is an equal opportunity educator/employer and offers an excellent academic research environment.

Biotech

Searching for the Path to Paradise? The Road to San Diego is Here!

San Diego is home to beautiful beaches, mountains, weather, and people! It is also the home of Stratagene, a leader in the development and manufacture of molecular biology research products. Stratagene is expanding its marketing organization and has the following opportunities currently available for motivated professionals looking for a change of scenery:

- Product Manager, Bioinformatics
- Product Manager, Biologicals
- Product Manager, QPCR
- Market Research Analyst

Stratagene offers a comprehensive benefits package, including relocation assistance. Interested candidates should submit their resume to: Stratagene, Human Resources, 11011 N. Torrey Pines Road, La Jolla, CA 92037; Fax: (858) 535-0071; or E-mail: jobs@stratagene.com. AA/EOE

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Applied Molecular Evolution (AME) is a rapidly growing public company and a leader in the application of directed evolution to the development of biotherapeutics.

AME seeks scientists who can work independently while applying problem solving skills to achieve critical project goals. AME provides a high level of responsibility in a dynamic working environment with the opportunity to develop and implement leading-edge protein engineering technologies. Additionally, AME scientists receive excellent benefits and compensation, including equity participation and generous performance-linked incentives. Our strategic growth has created an immediate need for scientists with the following qualifications:

Protein expression and purification Protein engineering Antibody engineering Immunoglobulin expression Reporter assays Animal models



HR Department Applied Molecular Evolution, Inc. 3520 Dunhill Street, San Diego, CA 92121 careers@AMEvolution.com

www.AMEvolution.com

Director, Lombardi Cancer Center Georgetown University Medical Center

Georgetown University Medical Center is recruiting an individual to serve as Director of the Lombardi Cancer Center and Chair of its Department of Oncology.

The Lombardi Cancer Center has nearly 150 faculty members who are involved in basic and translational cancer research. The Lombardi Cancer Center is an NCI-designated Comprehensive Cancer Center and is the only such center serving the greater Washington, DC area of 4 million people. The center supervises more than \$55 million in sponsored research in areas including Tumor Biology, Cancer Genetics, Cancer Prevention, and Developmental Therapeutics. In addition, there are multiple training grants and programs within the cancer center including a degree-granting program in Tumor Biology. The Department of Oncology is a university department comprised of divisions of basic, translational, clinical and population science research, which includes both teaching and research faculty.

We are seeking an outstanding scientist with substantial research experience in Oncology, a successful record of peer-reviewed funding or the equivalent, and significant administrative experience. This individual will interact with and supervise a broad range of basic research scientists, population scientists, and clinical researchers. Substantial resources and opportunities exist for building multiple programs at a university committed to academic traditions and translational research. Women and minorities are encouraged to apply. Interested candidates are invited to send a CV to John Richert, MD, Chair, Search Committee, Lombardi Cancer Center, Georgetown University Medical Center, E501 Research Building, 3970 Reservoir Road, NW, Washington, DC 20007.





Please mail, fax or e-mail your resume to: Cholla Power Plan Staffing Office, P.O. Box 188 - Station 4462, Joseph City, Arizona 86032 - phone -520.288.1367, fax - 520.288.1246 - KMOSIER@apsc.com.Application deadline: January 29, 2000. Compliance with 1986 Immigration Reform and Control Act required. No agencies please.

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COMPUTATIONAL BIOLOGY/BIOINFORMATICS/GENOMICS

University of Pennsylvania Faculty opportunities in bioinformatics are being significantly expanded at the University of Pennsylvania in the context of a new Genomics Institute. The Center for Bioinformatics seeks to make several new Tenure-track appointments over the coming years, including appointment of a new director. We are presently seeking outstanding candidates at any level who evidence a strong commitment to working in an interactive research environment including biologists, computer scientists, mathematicians and statisticians.

Areas of interest include: automated analysis of genomic sequence data, development of computational tools for genome database mining, gene expression analysis, population studies, theoretical and computational studies on protein or nucleic acid structure, analysis of metabolic pathway networks, comparative genomics, etc. Particular attention will be paid to candidates working on computationally-intensive projects with an applied or experimental orientation, who are poised to take advantage of the interdisciplinary research and educational environment at Penn. In addition to membership in the Center for Bioinformatics and Genomics Institute, academic appointments will also be made in one or more suitable department/school (Genetics, Biochemistry, Cell Biology, Cancer Biology, Pharmacology, Pathology, Biology, Bioengineering, Computer Science, etc). Extensive commitments throughout the university provide a stimulating network of colleagues engaged in genomics and computational research, an interdisciplinary environment capable of facilitating successful collaborations, and extensive computational and technological infrastructure.

Candidates should send a CV, description of research interests, up to 5 reprints (or a list of relevant URLs), and a list of 4-6 references to:



Bioinformatics Search Center for Bioinformatics/Genomics Institute 1313 Blockley Hall University of Pennsylvania 418 Guardian Drive Philadelphia, PA 19104-6021

THE UNIVERSITY OF PENNSYLVANIA IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION. EMPLOYER. WOMEN AND MINORITY CANDIDATES ARE ENCOURAGED TO APPLY.

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AviGenics, inc. Vice President of Research

AviGenics, inc., the leader in avian transgenesis and applications of modern biotechnology to poultry for biopharmaceutical production and agronomic trait improvements, has created the new position of Vice President of Research. The successful candidate will be the senior executive in charge of all research activities and will be responsible for the development of internal and external strategic research initiatives. You will have a proven record of accomplishments in biotechnology, transgenesis, animal science research or related fields and will lead a growing research staff currently approaching 20 scientists and technicians. You will develop, along with senior management and the Scientific Advisory Board, a robust execution process for ongoing research at AviGenics and will help craft a bold vision for the future.

The Vice President for Research will be a valued member of AviGenics' management team as the Company progresses through its early development and an IPO within two years. You will connect with thought leaders in the pharmaceutical and biotechnology industries and external academic centers. Working with Business Development, you will help close key strategic alliances and serve as a senior spokesman for AviGenics' scientific initiatives and strategies to the pharmaceutical, agricultural and business communities. An MS or PhD is required, with a minimum of ten years experience in related fields of research. You should be a capable manager with proven leadership skills.

AviGenics is located in Athens, GA, Georgia's "Classic City" and home to the University of Georgia. Athens anchors the eastern end of the emerging "Highway 316 Technology Corridor." About 70 miles apart, Athens and Atlanta offer the work ethic and cost of living advantages of the Southeastern U.S. Recognized as a major success in the state's growing biotechnology industry, AviGenics benefits greatly from its close association with the University of Georgia and from the Georgia Research Alliance's support for biotechnology innovation in the state.

AviGenics offers competitive compensation, including an attractive benefits package and stock options, and an intense, team-oriented work environment with opportunities for personal advancement and professional growth. For immediate consideration, qualified applicants should mail resumes to: Human Resources, AviGenics, inc., 425 River Road, Athens, GA 30602-1506 or email to garland@avigenics.com or fax to (706) 227-2180. Visit our website at www.avigenics.com.

AviGenics is an Equal Opportunity Employer.

International Scientific Conferences

at the University of Wisconsin Madison

Wisconsin Symposium II: The Analysis of Human Biology - Genes, Genomes and Molecules June 12 - June 16, 2001 12th International Conference on Arabidopsis Research June 23 - June 27, 2001 10th International Congress on Molecular Plant-Microbe Interactions July 10 - July 14, 2001 Molecular Genetics of Bacteria and Phages July 31 - August 5, 2001 12th International Workshop on Plant Membrane Biology August 11 - August 16, 2001 International Symposium on Biophotonics August 19 - August 21, 2001 Register, or find out more about these

Register, or find out more about these conferences at www.wisc.edu/meetings.



GRADUATE PROGRAMS

Graduate Study in Protein Chemistry

NIH Biotechnology Training Program

Announcing openings in the Biotechnology Training Program at Washington State University, featuring Studies in Protein Chemistry, Interdisciplinary Programs and Cooperation, Links between Basic and Applied Research, Providing for the Needs of Biotechnology, and Special Opportunities for Minority Students

- Financial support: annual stipend plus all tuition costs
- Travel funds to attend scientific meetings
- First-hand experience through industrial internships in a biotechnology firm
- Research projects chosen from 25 prominent research programs focused on protein chemistry
- Visits by leading scientists
- Core coursework in protein chemistry and biotechnology as well as innovative new courses in biotechnology

For more information, see http://molecular.biosciences.wsu.edu/graduate/ biotech.html. To apply, write: School of Molecular Biosciences, Biotechnology Training Program, Washington State University, Pullman, WA 99164-4660.



Symposium **ANNOUNCEMENTS Evolutionary &** Genes NEW YORK STATE SPINAL CORD INJURY RESEARCH BOARD & Genomes **Ecological** Functional Natural History 2001 Request for Innovative, **Collaborative Research Proposals** Function The New York State Spinal Cord Injury Research Board invites research proposals Genomics for support by the New York State Spinal Cord Injury Research Trust Fund. The Evolution Board's mission is to sponsor meritorious research that will promote development of new methods to reverse paralysis or restore function Symposia, accompanying compromised by injury, or to minimize or prevent damage during acute phases of contributed sessions and iniurv. discussion/planning at meetings of: While applicant organizations must be New York State entities, national or international collaborations are encouraged and will be supported through subcontract with the New York State organization. Funding will be provided for Society for Experimental Biology collaborations among established spinal cord injury investigators and those new Canterbury, UK, 2-7 April 2001 to the field, and among investigators from diverse disciplines, including basic research scientists and clinicians. •Society for Study of Evolution Up to \$12.5 million is available for awards in 2001. Proposals of up to four Knoxville, TN, 26 June-1 July 2001 years' duration may be submitted. Awards are generally expected to total up to U.S. postdocs & students: travel support available \$200,000 in direct costs per year. Larger awards may be approved if fully justified by the scientific significance of the proposed research and its relevance •8th Congress of the European to the Board's mission. Society for Evolutionary Biology Proposal applications are due March 31, 2001; funding is anticipated to begin September 1, 2001. Aarhus, Denmark, 20-26 August 2001 Proposal guidelines, instructions and application forms are available at: For information on symposia, submission of http://www.wadsworth.org/new/rfp/index.htm. contributions and travel support: For additional information contact: scirb@wadsworth.org. http://pondside.uchicago.edu/~feder/EEFG.html email:m-feder@uchicago.edu Supported by NSF



The Leukemia & Lymphoma Society ~

Fighting Blood-Related Cancers

TRANSLATIONAL RESEARCH PROGRAM 2001

Leukemia - Lymphoma - Myeloma

The Leukemia & Lymphoma Society provides early-stage support for clinical research on leukemia, lymphoma and myeloma, which is intended to develop innovative approaches to treatment, diagnosis or prevention. The program fosters collaboration between basic and clinical scientists with the intent of enhancing the transfer of basic research findings to clinical usefulness. The Translational Research Program is specifically intended for the support of work that has clinical application as a near-term goal.

Program Scope

Proposal should be based on epidemiological, molecular, cellular or integrated systems findings and be conceptually innovative. The application should have a clear plan for the clinical exploitation of the studies proposed. This feature of the proposal will be an important consideration of the review process.

Coordination with National Cancer Institute

The Translational Research Program was developed in consultation with the National Cancer Institute. Relevant NCI staff will be invited to participate with the Society in a review of the grantee's research at the beginning of year three of the grant. We hope that this meeting may enhance the grantee's opportunity to compete for sponsored funding to continue his or her studies.

Eligibility Requirements

Applications may be submitted by individuals working in domestic or foreign non-profit organizations, such as universities, colleges, hospitals, and laboratories. Applications from Society Scholars, investigators who are in an underrepresented minority, and women investigators are encouraged to apply.

Funds Available

Awards will be limited to a maximum of \$108,000, which include direct costs and 8% overhead per year for three years. Budget requests should be carefully justified and commensurate with the needs of the project. Renewal of funding for two additional years may be available from the Society. Requests for renewal of support require a competitive renewal application and must include an IRB-approved clinical trial as the centerpiece of the research plan.

Deadlines for Translational Research Program (New and Renewal) Preliminary Application (*submitted via website*): March 1. Complete application: March 15.

Application form and instructions are available from www.leukemialymphoma.org or contact:

Director of Research Administration The Leukemia & Lymphoma Society 1311 Mamaroneck Avenue White Plains, NY 10605 (914) 821-8843 email: researchprograms@leukemialymphoma.org University of Illinois at Chicago

Head Biochemistry & Molecular Genetics

Applications and nominations are invited for the new position of Head of the Department of Biochemistry & Molecular Genetics at the University of Illinois at Chicago (UIC). This new position has arisen from the merging of the Department of Molecular Genetics and the Department of Biochemistry & Molecular Biology to form the Department of Biochemistry & Molecular Genetics, with a mission for the Department to develop in a way that takes advantage of the enormous new opportunities afforded by the genomics revolution.

The new Head will be charged with integrating the current faculties of the Departments of Biochemistry & Molecular Biology and of Molecular Genetics, which currently consist of 29 full-time members with well-funded research programs supported by extramural funding in excess of \$11 million in the current year, including 30 NIH research and training grants. The constituent graduate programs are strong, with current combined enrollment of 78 graduate students. The new Head will be expected to play a key role in the establishment of a campus-wide Center for Genomic Sciences to develop genomics, proteomics and related disciplines.

The successful candidate should have a Ph.D. and/or M.D. degree, must be of national stature, have an active funded research program that fits well with the mission of the Department, have exceptional administrative skills, and have the vision and drive to ensure the successful integration of the constituent Departments and the development of genomic sciences at the college and institutional levels. The candidate should be eligible for professorship status with tenure.

For fullest consideration, nominations and/ or letters of application, along with curriculum vitae and names of three references should be submitted by March 1, 2001 to:

Asrar B. Malik, PhD, Professor & Head, Department of Pharmacology Chair, Biochemistry & Molecular Genetics Head Search Committee c/o Gregory S. Pittsley, Dean's Office UIC College of Medicine at Chicago 1853 W. Polk Street, Room 131 CMW (M/C 784) Chicago, Illinois 60612

UIC is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

Head, Department of Internal Medicine The University of Iowa College of Medicine

The College of Medicine at The University of Iowa seeks candidates for the position of Head. Department of Internal Medicine. The College of Medicine is among the top ten public medical schools in National Institutes of Health funding and is part of a major research university. The Department of Internal Medicine is also an integral part of UI Health Care which is a partnership between the College and The University of Iowa Hospital and Clinics. The University-owned teaching hospital is one of the largest in the United States and is adjacent to the Department of Veterans Affairs Medical Center. The Department of Internal Medicine has a distinguished teaching. research and clinical faculty. The Department currently has over \$32 million in NIH research funding. The Department has a large number of distinguished clinicians that are national and international leaders in their respective subspecialty areas. It is the major teaching department in the College of Medicine.

The Head is the spokesperson for the faculty of the Department and represents the Department in interactions with practitioners throughout the state, as well as nationally. Responsibilities include faculty recruitment and appointments; educational, clinical and research programs; fiscal planning and management; and short term and long term strategic planning.

Candidates must have a MD degree or equivalent and an outstanding record of accomplishments in teaching, research, and service as an academic Internist. The applicant must be eligible for licensure in Iowa, and certification by the American Board of Internal Medicine is highly desirable. The successful candidate should have the demonstrated capacity to foster an environment in which excellence in teaching, research and scholarship can flourish, as well as experience and interest in developing and leading clinical programs. Candidates should have a record of innovative and effective administrative and fiscal leadership, national stature in academic internal medicine, a record of excellent interpersonal skills and enjoy interactions with students, staff and faculty.

The University of Iowa is located in Iowa City, a vibrant community located in the rolling hills of southeastern Iowa. The community offers excellent schools, quality entertainment, literary, musical and cultural opportunities and Big 10 sporting events.

The search committee will accept nominations and applications until the position is filled. Nominations should include a brief statement of the attributes and qualities of the individual which make him or her ideally suited for this position, a *curriculum vitae*, and the names, addresses and telephone numbers of three or more references.

Please send applications to: Michael A. Apicella, M.D. Chair, Search Committee for Internal Medicine Attn: Ms. Mary Jo Young Office of the Dean, 201 CMAB The University of Iowa College of Medicine Iowa City, IA 52242-1101

The University of Iowa is an equal opportunity and affirmative action employer. Women and minorities are strongly encouraged to apply.

Chair of Pathology Dartmouth Medical School Dartmouth-Hitchcock Medical Center

Dartmouth Medical School and the Dartmouth-Hitchcock Medical Center seek a Chair for the Department of Pathology. Essential qualifications include a strong record of clinical, research and administrative accomplishments as well as excellent organizational and interpersonal skills. The Dartmouth-Hitchcock Medical Center houses an NCI funded cancer center and strong clinical and basic science departments. The Chair of Pathology will work collaboratively with leadership of the clinical enterprise at Dartmouth-Hitchcock and its satellites and the Dean of Dartmouth Medical School to innovate and build on existing excellence in the teaching, research and clinical programs already in place within the department.

Candidates should be board certified in anatomic and/or clinical pathology.

Letters of application should include a curriculum vitae with a summary of relevant clinical, academic and administrative experiences and the names of at least three references.

Letters of application should be sent to Peter K. Spiegel, M.D., Chair of the Search Committee for Pathology, c/o Ms. K. C. Waterman, Dartmouth Medical School Administration, One Rope Ferry Road, Hanover, New Hampshire 03755. Review of applications will begin February 15, 2001.

Dartmouth is an equal opportunity/affirmative action employer and strongly encourages applications from women and minority candidates.

EARTH SURFACE PROCESSES AT DUKE UNIVERSITY

The Division of Earth and Ocean Sciences of the Nicholas School of the Environment and Earth Sciences at Duke University invites applications for a tenure track position in Earth Surface Processes at the assistant professor level. For the purposes of this search, Earth Surface Processes includes marine and terrestrial geomorphology, coastal processes, hydrology, or any other area of inquiry in the physical sciences that involves the study of processes affecting the nature, form, history, evolution and future of the surface of the Earth. We are especially interested in hearing from candidates whose research focuses on questions involving large spatial scales. Candidates will be expected to develop an active and well-supported research program in their specialty, should have strong computational and field skills, and should enjoy teaching and mentoring both undergraduate and graduate students. Candidates should be able and willing to articulate their view of what research directions are likely to become the most important and fruitful in Earth Surface Processes during the early twenty-first century. With this hire we continue our efforts to make Duke University one of the nation's leading centers for the study of Earth Surface Processes

The starting date is open but we hope to fill the position by fall 2001. All applications received by March 1, 2001 will be considered. For additional information about EOS, please see our website at www.eos.duke.edu. Please send your vitae and the names and addresses of 3 references to: Chair of the Search Committee, Division of Earth and Ocean Sciences, Duke University, Box 90227, Durham NC 27708. Duke University is an equal opportunity employer.



Research and development is the future of any pharmaceutical company. That's why **Pharmacia Corporation** invests more than \$2 billion each year – to discover and develop the medicines that improve the health of people around the world. Our major R&D activities focus in the areas of cancer, arthritis/inflammation, infectious diseases, and disorders of the central nervous system, and we have a presence in ophthalmology, urology, and women's health. It is through exploring new avenues that we break through with world-leading therapeutic compounds and treatments. We are currently seeking enthusiastic self-starters to join our **suburban Chicago** team.

SENIOR TOXICOLOGIST Position # 00-1880

Representing the Global Toxicology Department on development project teams in the COX-2/Anti-inflammatory diseases therapeutic area, you'll help design, execute and defend preclinical safety assessment packages. Requires a Ph.D. in Toxicology, Pharmacology or related discipline combined with comprehensive knowledge of GLPs and excellent written/oral presentation skills. A minimum of 1-3 years of industry experience demonstrating knowledge of conducting a range of preclinical toxicology studies is highly desirable. **Respond to: http://respond.webhire.com/job/id?479-r1880-J1**

SENIOR PATHOLOGIST Position # 00-1879

Providing toxicology/pathology support in the COX-2/Anti-inflammatory diseases therapeutic area, you'll help design, execute and defend preclinical safety assessment packages. Requires a DVM, Ph.D. in related field as well as Board Certification in Anatomic Pathology; thorough knowledge of conducting a range of preclinical toxicology studies; knowledge of GLPs; and excellent written/oral presentation skills. A minimum of 3 years of industry experience is highly desirable. **Respond to: http://respond.webhire.com/job/id?479-r1879-J1**

Selected candidates for both positions will also design/provide oversight on regulatory toxicology studies, including design of protocols and review of reports; serve as Study Director/Monitor on critical or complex studies; and interact with project team representatives from other departments (Discovery Pharmacology and Chemistry, Product Development, Clinical, Regulatory Affairs, Project Management) to further the progression of the compounds and resolution of issues. In addition, these individuals will produce written summaries covering Toxicology aspects of the development program; implement research programs to address mechanistic issues arising from toxicology studies; provide guidance/leadership to peers on issues relating to specific areas of post-doctoral expertise; and provide project stature of Global Toxicology in the national/international toxicology community.

Discover your career potential with Pharmacia. We offer a competitive salary and benefits package including tuition reimbursement and 401 (k). For immediate consideration, please respond using our preferred online method utilizing the appropriate URL above. Or, you may fax your resume to the Pharmacia resume processing center, indicating appropriate Position **#** & referencing Science Magazine, at (520) 287-0963. As an EEO/AA employer, Pharmacia Corporation values a diverse combination of ideas, perspectives, and cultures. For more information and other opportunities, please visit our website at www.pharmacia.com



FACULTY POSITION IN BIOINFORMATICS/ QUANTITATIVE BIOLOGY/GENOME ANALYSIS ASSISTANT, ASSOCIATE OR FULL PROFESSOR OF BIOPHARMACEUTICAL SCIENCES (TENURE TRACK) DEPARTMENT OF BIOPHARMACEUTICAL SCIENCES UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

The Department of Biopharmaceutical Sciences, in conjunction with the Department of Biochemistry and Biophysics, invites applications for a tenure track position at the Assistant, Associate or full Professor level in the field of bioinformatics/quantitative biology beginning Summer 2001. We are seeking candidates with interests in genome analysis, structural genomics or bioinformatics, e.g., analysis of DNA and protein sequence information, who would participate in new initiatives at UCSF in genomics, pharmacogenomics and quantitative biology. We welcome applicants from math, computer science, or physics backgrounds

Applicants should have a Ph.D., M.D. or advanced degree with research experience and are expected to establish a dynamic research program. Applicants are also expected to actively participate in graduate training in Quantitative Biology and in professional school teaching. Applicants are eligible for membership in the PIBS and other graduate training programs.

Please send a curriculum vitae, three letters of reference, a summary of current research, and a concise outline of future research by March 15, 2001 to the address below. Electronic applications are welcome and **can be sent to** pspg@itsa.ucsf.edu.

Quantitative Biology/Genomics Search Committee Department of Biopharmaceutical Sciences, Box 0446 513 Parnassus, Room S-926 University of California San Francisco San Francisco, CA 94143-0446

UCSF is an affirmative action/equal opportunity employer. The University undertakes affirmative action to assure equal employment opportunity for underrepresented minorities and women, for persons with disabilities, and for Vietnam-era veterans and special disabled veterans.

PARTNERS.

CO-DIRECTOR, DRUG DISCOVERY FACILITY

Partners HealthCare System, Inc. and its Program in Neurodegenerative Diseases at Harvard Medical School invites applications for the position of Co-Director of our new assay development and robotic-drug screening and discovery facility.

The Partners drug discovery facility will serve the research communities of Massachusetts General, Brigham and Women's, and McLean Hospitals. Using the latest robotics, high throughput screening, and assay development technologies, the lab will function as an innovative academic drug screening facility focused specifically on neurodegenerative disease.

The Co-Director will help create this early-stage, drug discovery laboratory. Responsibilities include hiring of scientific staff and overseeing the design, implementation and operation of the laboratory. The successful candidate will be highly entrepreneurial and will have a strong interest in building a collaborative science center across Harvard-teaching hospitals. Applicants must hold a Ph.D. in a pharmacology, or chemistry-related discipline, have a minimum 5 years of experience in pharmaceutical drug screening and discovery, and demonstrate expertise in assay development, biochemistry and/or combinatorial chemistry. Knowledge of neuronal cell biology and CNS diseases is advantageous.

Compensation will be competitive with industry salaries. The possibility of intellectual property rights associated with drug discovery exists. The Co-Director will be a candidate for appointment to an academic position at Harvard Medical School.

Interested individuals should send curriculum vitae, statement of relevant background and names of three references to: Dr. Peter Lansbury, HIM 754, 77 Avenue Louis Pasteur, Boston, MA 02115.



Partners HealthCare is a not-for-profit organization dedicated to providing quality healthcare through its hospitals and physicians.

www.partners.org/jobs



Mayo Clinic Postdoctoral Position

A postdoctoral position is available to study activation of nicotinic acetylcholine receptors. Projects use single channel kinetic analysis to investigate: structures mediating agonist binding, structures defining the energy landscape for channel gating, structural rearrangements accompanying receptor activation and mechanisms by which naturally occurring mutations alter receptor function. Applicants must have a recent Ph.D. and experience in electrophysiology, molecular biology or both. Send curriculum vitae, description of research interests and names of three references to:

Steven M. Sine, Ph.D. 1-135 Medical Sciences Building Mayo Clinic Rochester, MN 55905 Email: sine@mayo.edu

Mayo Foundation is an affirmative action and equal opportunity employer and educator.

Full Professor Positions University of Alabama at Birmingham

Assistant, Associate and

The UAB Department of Environmental Health Sciences, School of Public Health, invites applications for two tenure-track positions ranging from Assistant Professor to Professor. The department, under new leadership, is developing programs in signal transduction, cell and molecular biology and/ or molecular toxicology in coordination with the UAB School of Medicine, Center for Free Radical Biology and Comprehensive Cancer Center. Joint areas of research include endocrine-responsive malignancies, prostate cancer, and asthma. Successful applicants will be offered spacious new laboratories with significant startup support and an outstanding collaborative environment. Applications should include curriculum vitae, names and contact numbers of three references, research interests, teaching interests, and how research goals can impact environmental health and toxicology.

Henry Jay Forman, Ph.D. Professor and Chairman Dept. of Environmental Health Sciences School of Public Health University of Alabama at Birmingham RPHB 317 1530 3rd Ave S Birmingham, AL 35294-0022 elderr@lab.soph.uab.edu TEL: 205-934-7032

The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF MINNESOTA DEPARTMENT OF LABORATORY MEDICINE AND PATHOLOGY NEUROPATHOLOGIST

Faculty position available in neuropathology at the rank of assistant to full professor (tenure-track or tenured) depending on qualifications. Minimum requirements are M.D., board certified or board eligible in anatomic pathology and neuropathology, eligible for medical licensure in Minnesota. Demonstrated research productivity is necessary. Excellent opportunities exist for interaction with University research and graduate programs in Neuroscience, Cell Biology and our interdisciplinary graduate program.

Applicant will participate in providing neuropathological services to Fairview University Medical Center and University-affiliated hospitals. Teaching responsibilities will include residents in anatomic pathology, neurology, neurosurgery, and medical students.

Applicants please send curriculum vitae, names of three references, and a brief research summary to:

Neuropathology Search Committee c/o Marilyn Green Department of Laboratory Medicine and Pathology MMC 609, 420 Delaware St. SE Minneapolis, MN 55455

Applications will be received through February 16, 2001 or until position is filled. Applications will be reviewed upon receipt.

The University of Minnesota is an equal opportunity employer and educator.



Gene Therapy Systems, inc.

Positions available for Scientists in Gene Therapy, Genomics, Molecular and Cell Biology.

Gene Therapy Systems is a rapidly growing biotech company engaged in the development, manufacturing & marketing of quality biomedical research products. GTS has state of the art gene delivery reagents called GenePORTER, a novel gene chemistry technology called Gene Grip which uses peptide nucleic acid (PNA), and an exciting new kit for producing transcriptionally active PCR fragments called TAP Express. The technologies can be used for in vitro expression and in vivo gene therapy applications.

Successful candidates will participate in the discovery, development and application of these exciting new technologies. We have openings for benchoriented scientists with experience in Molecular and Cellular biology, at the BS, MS and PhD levels.

We offer a competitive compensation & benefits package, incentive stock plan, a 401(k) plan, and a stimulating work environment. Send resumes to: Philip Felgner CSO, Gene Therapy Systems, 10190 Telesis Court, San Diego, CA 92121 Fax: (858) 623-9494, or e-mail: humanresources@genetherapysystems.com

Clarus Technologies Inc. is a newly formed genomics company located in Maryland. We are seeking qualified applicants for the following positions:

- **Bioinformatics-Ph.D./M.S.** Experience in using bioinformatics tools and public databases required.
- Molecular Biologists Experience in cDNA library construction, gene cloning or viral vector design required.
- Immunologists Experience with various antibody production technologies required.

Please send curriculum vitae to lcarter@emrgtech.com

Discover Merck.

Employment opportunities in West Point, PA and Rahway, NJ 🌔 🎙

As a leading research driven pharmaceutical products and services company recently ranked by Fortune among "America's Most Admired Companies," Merck & Co., Inc. discovers, develops, manufactures and markets a broad range of innovative products. We currently have exceptional career opportunities available at our modern West Point, PA facility only 25 miles NW of Philadelphia, and in our Rahway, NJ facility.

Immunologists/Biochemists - West Point, PA

Merck Research Laboratories in West Point, PA, a world leader in biological and pharmaceutical research, has immediate openings for B.S./M.S. Scientists in vaccine, gene therapy, and therapeutic protein product development.

As an Immunologist you will develop and utilize cellular and humoral assays to define immune responses in human patients. Your work will require utilization of your knowledge of standard biochemical, immunological, molecular biological, virological, and bacteriological methods to advance our product development. These positions require a B.S./M.S., or equivalent, in Biochemistry, Molecular Biology, Virology, Immunology, or a related field. Experience with assay development and validation is required and sterile technique is desired. GLP/GMP experience is preferred. You must have the ability to solve problems independently, demonstrate excellent communication skills, and work effectively in a team environment. When applying, please refer to PAF Code: **XHXMRMBKH6320**.

Senior Research Microbiologist - Rahway, NJ

We are seeking a Ph.D. scientist to study the molecular and genetic regulation of natural products biosynthesis in actinomycetes and fungi. The successful candidate will design and carry out experiments in areas of natural products pathway manipulation, biocatalysis, and metabolic engineering. Laboratory skills in molecular biology and biochemistry are required. Knowledge and laboratory experience in organic chemistry of natural products and biochemistry of natural products pathways are desirable.

The successful applicant should have a Ph.D. and postdoctoral/industrial experience in microbial natural product biochemistry, molecular biology, and/or chemistry. The successful applicant should also have a proven track record of accomplishments including significant publications. Leadership and supervisory skills are a plus. When applying, please refer to **PAF Code: XHXMRSMCW12100**.

Research Associate - Rahway, NJ

You will participate in a project to characterize the role of chemokines and chemokine receptors in inflammation and to define appropriate therapeutic strategies to modulate this process. In this position, you will develop, implement, and carry out in vivo assays for the identification of novel agents which act as chemokine receptor antagonists. This includes pharmacological characterization and drug validation in animal models of human diseases.

The successful candidate must possess a B.S./M.S. degree in Biology and 2+ years' research experience, preferably in in vivo animal biology. The candidate should be highly motivated, well organized, possess excellent communication skills, and work well in a team environment. When applying, please refer to **PAF Code: XHXMRSMJP12100**.

We offer a comprehensive salary and benefits package, including tuition reimbursement and one of the best 401(k) plans in the nation, as well as opportunities for professional growth. To be considered, please submit your resume and cover letter, indicating salary requirements and PAF Code, to: Merck Positions, P.O. Box 92164, Los Angeles, CA 90009-2164. E-mail: merck@resume.isearch.com Fax: (310) 337-3393. Candidates selected for interviews will be contacted. We are an Equal Opportunity Employer, M/F/D/V.



Visit our website at www.merck.com

FACULTY POSITION IN PHYSIOLOGY Department of Molecular Biology and Microbiology University of Central Florida

The Department of Molecular Biology and Microbiology invites applications for a nine-month, tenure track faculty position at the Assistant/Associate Professor level. The successful candidate is expected to develop and maintain an extramurally funded research program in any area of molecular, cellular or integrative mammalian physiology and participate in undergraduate teaching in human physiology. The selected candidate will also participate in the new interdisciplinary doctoral program in Biomolecular Sciences and will have an opportunity to collaborate with the faculty of the Center for Discovery of Drugs and Diagnostics (CD3). Applicants should have a Ph.D. degree and preferably three years of postdoctoral training in a relevant area of expertise. Applicants for the Associate Professor level are expected to have an extramurally funded research program and demonstrate excellence in research. Salary, laboratory space and start-up funds are highly competitive. Departmental support facilities include subsidized animal housing, state-of-the-art microscopy facility, new laboratory space and BSL-3 laboratories in the soon to be completed Biomolecular Sciences research building. The University of Central Florida with an enroll ment approaching 35,000 students is a rapidly expanding comprehensive research oriented state university located in one of the fastest growing metropolitan areas in the nation. Starting date: August 2001. Review of candidates will begin on February 1, 2001 Applicants should send curriculum vitae, summary of present and future research plans, summary of teaching interest and names of three referees to:

Ratna Chakrabarti, Ph.D. Chair, Search Committee Department of Molecular Biology and Microbiology University of Central Florida, Bio 330, Orlando, FL 32816

The University of Central Florida is an affirmative action/equal opportunity employer. As an agency of the State of Florida, all application materials and selection procedures are available for public review.



Department of Chemistry and Chemical Biology

Harvard University has an exciting and challenging opportunity for a leader with proven experience to guide and motivate a strong team in the administrative and support functions of the Department of Chemistry and Chemical Biology. The faculty seeks an innovative and perceptive senior executive to develop staffing structures, recruiting efforts and student programs within the department. Requirements include minimum ten years' successful management experience in coupled research and teaching environments; strong human resource, facilities, and financial management skills. Advanced degree preferred.

Written inquiries should be directed to: Professor James G. Anderson, Chair of the Department of Chemistry and Chemical Biology, Harvard University, 12 Oxford St., Cambridge, MA 02138; fax: (617) 495-4902.

At Harvard University, diversity is an essential source of vitality and strength.



Tenure-Track Neurobiologist

The Department of Neurobiology and Behavior at Stony Brook University invites applications for a tenure-track Assistant Professor position. We are interested in recruiting a neurobiologist using genetic approaches to understand the structure and function of vertebrate nervous systems. Applicant must have a Ph.D. or equivalent degree and postdoctoral experience. Generous space and startup funds will be provided. The successful applicant will be expected to participate in undergraduate and graduate teaching. Review of applications will begin March 1, 2001. Information about the Department of Neurobiology and Behavior and the broader Graduate Program in

Neurobiology can be obtained at: http:naples.cc.sunysb.edu/CAS/neuro.nsf Send a CV including a short description of current research and career goals and arrange for three letters of reference to be forwarded to: Faculty Search Committee Dept, of Neurobiology and Behavior Life Science Building

SUNY/Stony Brook Stony Brook, New York 11794-5230 AA/EOE



THE UNIVERSITY OF 70NA TUCSON ARIZONA **ASSISTANT/ASSOCIATE OR FULL PROFESSOR** PLANT GENOMICS

The Department of Plant Sciences of the University of Arizona intends to fill a tenure eligible assistant/associate or full professor position in plant genomics on or after August 1, 2001. Our interests include structural, functional & nutritional genomics & proteomics in plants. The research approach should integrate the application of molecular & biochemical genetics to isolate, study & manipulate plant genes & proteins. The successful candidates will be expected to participate in undergraduate & graduate teaching of plant biochemistry, & to interact & collaborate with other faculty members working in genomics & proteomics. The position requires a Ph.D. degree & postdoctoral research experience in an appropriate field of study. Candidates must demonstrate excellence in research & the communication skills necessary to be an effective teacher. In addition, the individual must have an ability to attract extramural grant funding. The salary will depend upon qualifications & experience. Review of applications begins February 23, 2001 & continues until the position is filled. Send the letter of application including statement of research & teaching interests, resume, & arrange for three letters of reference to be sent to: Dr. Vicki L. Chandler, Chair, Plant Genomics Search Committee, Department of Plant Sciences, 303 Forbes, Bldg. 36, The University of Arizona, Tucson, AZ 85721. The University of Arizona is an EEO/AA Employer-M/W/D/V.

POSTDOCTORAL POSITION IN IMMUNOLOGY

Postdoctoral position in tissue specific autoimmunity available immediately in the Laboratory of Immunology, NEI, NIH. The project involves development and use of antigen-MHC-class II dimers on an Ig backbone (parallel technology to MHC tetramers) to identify, track and modulate the function of autoreactive T cells in an antigenspecific fashion.

Additional information on http://www. nei.nih.gov/intramural/imm-reg.htm. Applicants must have a strong background in immunology and molecular biology and less than 5 years post-doctoral experience. Stipend is \$30,000 - \$40,000 per year, commensurate with experience. Contact:

Dr. Rachel Caspi Lab. Immunology, NEI, NIH 10 Center Drive, 10/10N222 Bethesda, MD 20892-1857 Voice: (301) 435-4555 Fax: (301) 480-6668

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A^t Pfizer, we just made the best even better! Pfizer Global Research and Development draws on the expertise of Pfizer and Warner-Lambert to create a vast R&D enterprise with an annual budget of more than S4.7 billion.

If you're intrigued by working with exceptional people on exceptional challenges, maybe yours could be the new Face of Pfizer. Picture yourself in one of the following opportunities at our research facilities in Ann Arbor, Michigan, Groton, Connecticut, and La Jolla, California.

Systems Analyst/ Sr. Systems Analyst (Ann Arbor)

You'll develop systems, applications and methods to advance Pfizer's bioinformatics R&D program in target informatics, expression informatics and data integration. You'll need an MS in Computer Science or equivalent experience and good knowledge of UNIX, Perl and Java programming. We also require proven experience in bioinformatics software engineering and knowledge of sequence analysis tools and some molecular biology. Req. #00-0461

Laboratory Supervisor (Groton)

We're seeking a Cancer Pharmocologist to supervise a laboratory focused on discovering novel antitumor agents. Along with your PhD, you'll need 5+ years experience in cancer pharmacology *in vivo* tumor models, and developing novel pharmacodynamic endpoints *in vivo*. Strong communication skills, a track record of significant achievement as part of a multidisciplinary team, and experience as an effective laboratory supervisor are critical. Rea. #28Nov0000872

Senior Research Scientist (La Jolla)

We have immediate opportunities available for experienced Virologists to join our team. You will be responsible for performing experimentation and direct internal and external collaboration to discover, identify and evaluate preclinical anitviral compounds and to support the clinical development of antiviral drugs. This position requires a PhD in Virology or Molecular Biology and comprehensive knowledge of virology as it applies to molecular biology and/or biochemistry. Experience in HIV antiviral drug development is desired, as is an understanding of drug resistance principles and regulatory submissions preparation. Reg. #0181128WB

Research Scientist, Expression and Fermentation Technology Group (Groton)

We are seeking a scientist with expertise in prokaryotic/eukaryotic expression systems as they relate to the production of proteins for X-ray crystallographic and NMR structural studies. Additional responsibilities include working with a multidisciplinary team to evaluate and integrate new expression technologies. This position requires a PhD in Molecular Biology or a related field and strong supervisory skills. You must have a thorough understanding of protein purification and biochemical characterization, as well as a record of independent research in an academic or industrial environment. Rea. #00-0010007

Recently ranked among *Fortune's* 100 Best Companies to Work For, Pfizer offers an exceptional work environment complete with training opportunities designed to develop your professional talents. We encourage all applicants to apply by emailing your resume, indicating appropriate Req. *#* in the subject field, to SCIENCE@pfizerresumes.com. If necessary, you may also mail your resume indicating Req. *#*, to Pfizer Resume Processing Center, 630 Boston Road M-104, Billerica, MA 01821, ATTN: Softshoe Resumes. An equal opportunity employer, Pfizer offers a workplace rich with diversity and potential.



Life is our life's work.

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY Where you can become your best.

Director, Laurence H. Baker Center for Bioinformatics and Biological Statistics Plant Sciences Institute

lowa State University invites nominations and applications for this position, which will spearhead the university's strategic expansion of its research programs in bioinformatics, computational biology, and biological statistics. Existing support for this effort includes a \$5 million endowment, a \$3 million NSF IGERT Training Grant in computational biology, and resources provided through Iowa State's Plant Sciences Institute, which is currently funded at \$5 million per year.

The successful candidate will be energetic and creative, with a strong record of leadership in research and a commitment to diversity in hiring and recruitment; a distinguished computational or mathematical scientist with a strong research record, including work in bioinformatics or computational biology; and will be appointed as a tenured full professor in a suitable academic department of his or her choice.

The center director is expected to foster an increasingly rich environment for interdisciplinary research through his or her own research activities and the hiring and professional development of center faculty.

Iowa State University, one of the nation's leading land-grant institutions, offers an outstanding and uniquely interactive environment for interdisciplinary research in bioinformatics, computational biology, and biological statistics. Targeted hiring in bioinformatics and biological statistics has added more than 10 center faculty in the past three years. The center includes 60 faculty members from computer science, mathematics, statistics, physics, engineering, and several biological sciences departments. Iowa State's Ph.D. program in bioinformatics and computational biology attracts outstanding graduate students and offers curriculum for interdisciplinary training of faculty as well as students. New core facilities for microarray and proteomics analyses complement a wide range of state-of-the-art facilities for interdisciplinary research. For additional information, please visit **www.iastate.edu** and **www.bioinformatics.iastate.edu**.

Nominations should include the name, mailing address, and e-mail address of the nominee. Applications should include a letter expressing the applicant's interest, relevant experience, and qualifications; curriculum vita; and names, addresses, telephone numbers, and e-mail addresses of five references. Nominations and applications should be submitted to Dr. James R. Bloedel, Search Committee Chair, Office of the Vice Provost for Research and Advanced Studies, Iowa State University, 211 Beardshear Hall, Ames, Iowa 50011 or jbloedel@iastate.edu. Questions can be addressed to Gaye Simonson at gmsimon@iastate.edu. To guarantee consideration, applications must be received by February 1, 2001.

lowa State University is an equal opportunity/affirmative action employer and strongly encourages nominations of, and applications from, women and minority candidates. The university is responsive to the needs of dual-career couples.

Faculty Position in Virology and Cancer

University of Wisconsin - Madison McArdle Laboratory for Cancer Research and Institute for Molecular Virology

The Institute for Molecular Virology and the McArdle Laboratory for Cancer Research are seeking outstanding candidates for a joint, tenure-track, assistant professor position in the area of cancer virology. Applicants should be interested in using basic research in virology to understand processes governing the molecular basis, prevention and/or therapy of cancer. The position provides access to a variety of shared facilities, including full resources for molecular and cell biology, a BL-3 facility for work with pathogenic viruses, and superb animal facilities for mouse genetics, geneknockouts and transgenic animals. The successful applicant will also participate in excellent, well-funded graduate and post-graduate training programs.

Applicants should submit a curriculum vitae with publication list, a 2-3 page summary of research accomplishments and future research plans, and have 3 qualified individuals send letters of evaluation to: Dr. Paul Ahlquist, Search Committee Chair, Institute for Molecular Virology, University of Wisconsin Madison, 1525 Linden Drive, Madison, WI 53706-1596; Tel: (608) 263-5916. Review of applications will begin on March 1, 2001.

The University of Wisconsin is an equal opportunity/affirmative action employer. Minority and women candidates and all other qualified persons are encouraged to apply. Under Wisconsin statutes, names, positions and addresses of applicants and nominees may be subject to release upon request.

GLOBAL OPPORTUNITIES





Following the successful launch of the Nature Review journals including Nature Reviews Genetics, Nature Reviews Molecular Cell Biology and Nature Reviews Neuroscience, we now invite applications for the post of:

Editor, Nature Reviews Pharmaceutical Sciences

To be launched in 2001 this journal will use cutting-edge technology and pioneering formats to create the definitive resource for scientists in search of an authoritative, comprehensive overview of their field.

The position of Editor is a senior appointment, reporting directly to the Publisher. The Editor will lead a skilled and dedicated team and will be responsible for developing the editorial content of the journal, in print and online. To meet these challenging tasks, the ideal candidate will have intellectual vision and strong leadership qualities. He or she will have a PhD in a relevant field, exceptional scientific judgement with a broadbased knowledge and understanding of their research community. The successful candidate must be dynamic and outgoing with outstanding interpersonal skills. Editorial experience would be a distinct advantage.

The position will be based in the Nature Publishing Group's London or New York offices and the terms and conditions are highly competitive, reflecting the critical importance and responsibilities of the role.

Applications and a CV, discussion of relevant experience, and an indication of specific ambitions for the journal should be sent to the publisher no later than January 8th. For more information see our websites http://www.nature.com/reviews and <u>http://www.nature.com/naturejobs</u>

The Publisher, Nature Review Journals, 4 Crinan Street, London N1 9XW. e-mail: reviewjournals@nature.com

Career Scientist

The Northeastern Ontario Regional Cancer Centre (NEORCC) is a division of Cancer Care Ontario, which provides a province-wide system of cancer prevention, treatment, research and education. NEORCC conducts research in a wide variety of areas including clinical trials, radiation therapy, epidemiology, psychosocial services, and the molecular biology of cancer. The Tumour Biology Group is a highly successful research group at NEORCC which enjoys substantial support by peer review agencies such as CIHR (formerly MRC), NSERC, Cancer Research Society, Heart & Stroke Foundation, Canadian Breast Cancer Foundation, and Ontario Research and Development Challenge Fund. We are currently seeking a Career Scientist.

This will be the first of three "hard salary" positions, which will include a generous start-up grant and stable core funding. The successful applicant will establish and direct an effective research program in tumour/cancer biology using current methods in molecular biology, biochemistry, cell biology, radiobiology or pharmacology. The individual will have the opportunity to work in a newly established, modern laboratory and will be encouraged to collaborate with other scientific and clinical researchers. Although this is a full-time research position, some teaching/supervision of Laurentian University undergraduate and graduate students will be expected. The successful candidate will also be expected to acquire additional research support from national and/or international granting agencies. A Ph.D. degree with at least two years of post-doctoral experience is required. Academic appointments at Laurentian University and/or the University of Ottawa Medical School will be available. Bilingualism (English/French) is an asset.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Applications are invited from all qualified candidates.

Applicants should submit a curriculum vitae, summary of research experience, and a brief statement of research plans. These materials and three letters of recommendation should be sent before March 1, 2001 to:
Dr. Amadeo Parissenti, Chair in Cancer Research, Northeastern Ontario Regional Cancer Centre, 41 Ramsey Lake Road, Sudbury, Ontario, Canada, P3E 5J1. Please quote file name: SCI 12/00.

For a more detailed description of the Tumour Biology Group, its research programs, and its staff, please visit our website at: http://www.neorcc.on.ca/research/tumour/webpage.html

We are an equal opportunity employer.

Northeastern Ontario Regional Cancer Centre

Cancer Care Ontario

operates eight regional cancer centres in Ontario, with several new centres scheduled to open between 2002 and 2005. Our work includes programs in cancer prevention, screening, treatment (medical, surgical and radiation), supportive care, research, education and the development of treatment guidelines.

Cancer Care Ontario is the province's leader in the integration and coordination of cancer control services, and the Ministry of Health and Long-term Care's principal adviser on cancer issues.



NEBRASKA CENTER FOR VIROLOGY UNIVERSITY OF NEBRASKA

The new established Center funded by NIH invites applications for tenure track faculty, along with post- and predoctoral fellows. We offer state of the art core facilities in microscopy, bioinformatics software development, and structural biology and a research-intensive environment dedicated to understanding basic mechanisms of viral pathogenesis, immunity, evolution, host interactions and replication.

FACULTY POSITIONS

This is a first of a series of tenure-track ASSISTANT PROFESSOR positions in virology at the University of Nebraska-Lincoln. Candidates must have an established research program or show exceptional promise toward establishing a research program in one of the following: Viral Immunology, Vaccine Development, Pathogenesis, Host Cell Interactions, Evolution, Informatics, or structural-function. Requirements include a PhD and/or MD, relevant postdoctoral research abilities. Faculty members are expected to develop an active, extramurally funded research program and be involved in undergraduate and graduate student teaching. Excellent opportunities exist for collaboration with other members within the Center and other University departments.

POSTDOCTORAL AND PREDOCTORAL FELLOWSHIPS

The Center seeks applications for postdoctoral and predoctoral fellows in virology. Postdoctoral fellowships are awarded to candidates dedicated to research in virology with a track record of research accomplishments. Motivated POSTDOCTORAL candidates with a PhD and/or MD in microbiology or a related field and PREDOCTORAL students with an interest in virology are encouraged to apply. Some of the training preceptors within the virology center include: Clinton Jones, PhD - Herpesvirus Latency; Jim Van Etten PhD Chlorella Virus; Robert Weldon, Jr., PhD - Retrovirus Assembly; Charles Wood, PhD - HIV and Kaposi's Sarcoma-Associated Herpesvirus Pathogenesis Review of applications will begin March 1, 2001 Positions remain open until suitable candidates are found. To apply, submit a curriculum vitae, description of research interests, and names of three references to Dr. Charles Wood, Director, Nebraska Center for Virology, School of Biological Sciences University of Nebraska-Lincoln, E249 Beadle Center, Lincoln, NE 68588-0666. Phone (402)472-4550; Fax (402)472-8722; cwood1@unl.edu. For additional information and other training opportunities, see http://bims.unmc.edu/ Virology/. UNL is committed to AA/Eeo and ADA/504



DIRECTOR: PHYSICAL SCIENCES S&T DIVISION

The Office of Naval Research (ONR) is seeking an outstanding individual to serve in this Civil Service position in the Senior

Executive Service (SES). Salary range is \$115,811 to \$130,200 per year, depending on qualifications. In addition to salary, career SES appointees are eligible to compete for performance awards and bonuses. Filling of this position is subject to position allocation availability.

The Director, Physical Sciences S&T Division is responsible for managing and directing extensive activities in fostering, developing, administering, and executing an integrated program of basic research, applied research, and advanced technology development in the fields of chemistry, physics, and environmental sciences. These areas include, but are not limited to, research efforts in physical chemistry, polymer sciences, electrochemical sciences, surface and solid state chemistry, organic chemistry, theoretical physics, laser and laser optics physics, non-linear dynamics, physical acoustics, plasma physics and environmental quality that focus on specific issues relevant to Naval Forces. The Division Director provides leadership to the Division's Program Officers, many of whom are world class scientists and engineers. The Division Director is the scientific administrator of the Office of Naval Research programs in these fields and serves as expert consultant and advisor in these areas to research management of the Chief of Naval Research and other top professional and military personnel in the Department of the Navy (both in Headquarters and field organizations), the Department of Defense, other government agencies, and industrial and university research and development organizations.

For detailed information on qualifications and how to apply, applicants may download a copy of Announcement #ONR-00-0016 from the either the Department of the Navy's Human Resources web site http://www.donhr.navy.mil, ONR's web site http://www.onr.navy.mil/hr or the Office of Personnel Management's USA Jobs web site http://www.usajobs.opm.gov. Applications must be in the HRSC Office by COB 16 February 2001. For technical information concerning this position, applicants may contact Dr. Spiro Lekoudis at (703) 696-4408.

ONR IS AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER AND PROMOTES DIVERSITY IN THE WORKPLACE. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.

Position Announcement DEAN OF THE GRADUATE COLLEGE Oklahoma State University

Stillwater, Oklahoma

The Board of Regents for Oklahoma State University invites nominations and applications for the position of Dean, Graduate College. The Dean reports to the Executive Vice President for Academic Affairs and serves as the chief academic, business, and fiscal officer of the College.

Oklahoma State University is proud of its 100 year history as a premier land-grant, multi-campus university, with graduate programs offered in Stillwater, at the OSU-Tulsa campus, and through distance education. The graduate student population exceeds 4,200, with students from 44 states and 91 countries. OSU continually strives to provide an educational environment that fosters cultural diversity and rich intellectual exchange between faculty and students. Seventy-one master's and 45 doctoral programs are available. Further information about programs and activities can be found at the following web site: www.osu-ours.okstate.edu/gradcoll

QUALIFICATIONS: Candidates should possess proven leadership and management skills; a thorough knowledge of the philosophy and mission of a graduate college; a knowledge of the philosophy and mission of a land-grant university; a demonstrated capacity to work effectively with faculty, students, and leaders in business, industry, and other educational agencies and institutions; and evidence of ability to attract external funding. Preferred qualifications include an earned PhD, with a record of scholarly achievement in research and teaching that meets qualifications for membership on the Graduate Faculty and tenure in an OSU discipline; a minimum of three years of administrative experience at a comprehensive research university, or the equivalent; and the ability to work and communicate effectively with all publics served by the College.

SALARY: Commensurate with qualifications.

BEGINNING DATE: As soon as possible following acceptance of position.

The search will remain open until the position is filled. For full consideration, applicants should submit a letter of application, curriculum vitae, and the names and addresses of three references no later than February 15, 2001, to:

Dr. Ann Candler Lotven Chair, Search and Screening Committee for Dean, Graduate College 101 Whitehurst Hall Stillwater, OK 74078-1011 or by E-mail to dweaver@okstate.edu

Oklahoma State University is an Affirmative Action/Equal Opportunity Employer

Biotech

PRO-NEURON, INC.

SCIENTIST POSITION AVAILABLE

Pro-Neuron, Inc., is a developmental stage biopharmaceutical company in Gaithersburg, MD with several compounds in clinical trials for a variety of indications. The company is seeking Ph.D. scientists in molecular biology. Expertise in transcription factors, diabetes and/or stem cells is advantageous. Successful candidates will investigate the molecular mechanisms of action of proprietary compounds. Qualified applicants will have a Ph.D. in Molecular Biology or related discipline and at least 2 years of postdoctoral training. Excellent verbal and written communications skills are required.

Pro-Neuron, Inc., an EEO employer, offers an excellent salary and comprehensive benefits package. Please send a resumé and cover letter to:

> Pro-Neuron, Inc. Attn: HR/SW 16020 Industrial Drive, Gaithersburg, MD 20877

Ribozyme Pharmaceuticals, Inc., a leader in the development of ribozyme based pharmaceutical products, has the following opening at our company in **Boulder**, CO:

Scientist/Pharmacokinetics

Seeking a Ph.D. level scientist to conduct and support preclinical and clinical pharmacokinetic studies of ribozymes. Responsibilities will also include the design, conduct, and the interpretation of studies utilizing standard pharmacokinetic modeling software. Expertise with standard biochemical assays used for drug quantitation such as HPLC, CGE or MS is required. Previous experience with oligonucleotides is also desirable. Must be an independent thinker with the ability to direct projects and interact with scientists from diverse disciplines. Applicants must have a Ph.D. Excellent communication skills required.

We offer a competitive salary and benefits package, including a stock option plan. For consideration, please reference Science - Job #087 and send resume and salary requirements to Ribozyme Pharmaceuticals Inc., 2950 Wilderness Place, Boulder, CO, 80301. Fax# 303-449-6995 or email to jobs@rpi.com. We are an Equal Opportunity Employer.



BOSTON UNIVERSITY SCHOOL OF MEDICINE

Chair

New Department of Genetics

Boston University School of Medicine is seeking a prominent, nationally recognized scientist, who is ready to lead a newly created Department of Genetics. This exciting, challenging position offers the opportunity to identify research directions for the Department that will complement existing programs at the Medical School.

The Chair will be expected to maintain his or her own research program, will be responsible for centralizing and integrating teaching and degree programs in genetics at the Medical School, and will lead an effort to develop new core genetics/ genomics facilities that interface with those at the medical school and main campus. Research and office space, funds for core facilities, and for recruiting new faculty are available.

Forward applications or nominations to: Genetics Search Committee, c/o Jerome S. Brody, M.D., Boston University School of Medicine (R-3), 715 Albany St., Boston, MA. 02118. email: jbrody@bu.edu.

MOLECULAR GENETICS DEADLINE EXTENDED

The Department of Biological Sciences, Texas Tech University invites applications for a Molecular Genetics position beginning September 2001. Applications are encouraged at the assistant, associate, or full professor rank, and nominations of colleagues are welcome. The successful applicant will have a doctoral degree and postdoctoral experience and will be expected to establish a nationally recognized, extramurally funded research program aimed at understanding gene function using molecular genetic approaches and model organisms. The area of research is open and could range from particular genes to entire genomes. Academic rank and salary will depend on the successful candidate's qualifications and experience. The deadline to receive applications is February 1, 2001. Applicants must submit a description of research goals, teaching interests and philosophy, curriculum vitae, and three representative reprints and arrange to have three letters of reference sent to: Dr. Carleton J. Phillips, Chairperson, Department of Biological Sciences, Texas Tech University, PO Box 43131, Lubbock, TX 79409-3131. Visit our web site at http://www.biol.ttu.edu.

Women and members of underrepresented groups are encouraged to apply.

ANNOUNCEMENTS

The **Doris Duke Charitable Foundation** Announces \$15 Million in Awards to Support **Clinical Research**



For details on these programs, refer to our web site at: http://ddcf.aibs.org Congratulations to our new award winners!

Clinical Research Fellowship Program for Medical Students The following medical schools received grants to establish Doris Duke Clinical Research Fellowship Programs:

University of California - San Francisco School of Medicine

Washington University School of Medicine

University of Iowa Callege of Medicine

Harvard Medical School

University of North Carolina Medical School at Chapel Hill

The Callege of Physicians & Surgeons at Calumbia University

The University of Texas Southwestern Medical Center at Dallas

The above schools are currently soliciting applications from medical students for these one-year fellowships. Medical students matriculated at any U.S. medical school are eligible to apply.

Distinguished Clinical Scientist Award for "Bench to Bedside" Research

The following seven outstanding mid-career physician-scientists will receive a \$1.5 million grant to support their research teams and foster translational clinical research:

Alan D. D'Andrea, M.D. / Dana-Farber Concer Institute Project Title: Establishment of a Diagnostic & Treatment Center for Fanconi Anemia

Helen E. Hesop, M.D. / Baylor College of Medicine Project Title: Immunotherapy of Cancer

David A. Katzenstein, M.D. / Stanford University School of Medicine Project Title: Affordable Treatment & Intervention to Prevent Drug Resistance Among HIV Infected Women & Their Infants in Southern Africa

Donald B. Kohn, M.D. / Children's Hospital Los Angeles Project Title: Gene Therapy for Blood Diseases Using Hematopoietic Stem Cells

Andrew R. Marks, M.D. / Columbia University, College of Physicians & Surgeons Project Title: Novel Approaches to Treating Heart Disease

Olufunmilayo I. Olopade, M.D. / University of Chicago School of Medicine Project Title: Molecular Genetics of Aggressive Breast Cancer

Paul M. Ridker, M.D., M.P.H. / Brigham & Women's Hospital, Harvard Medical School Project Title: Molecular & Genetic Approaches to Cardiovascular Disease Prevention, Epidemiology, & Risk Assessment

GLOBAL OPPORTUNITIES



The Brain Science Institute (BSI) at RIKEN is offering a summer program to train advanced students interested in brain functions. Applicants may choose either a laboratory internship for two months with one of the 37 Laboratories at BSI, or participate in an intensive 9 day lecture course featuring a distinguished international faculty. Summer Interns (Plan A) also can enroll in the Lecture Course (Plan B). Generous support towards travel and lodging expenses will be provided. Deadline : February 26, 2001



INTERNSHIP (PLAN A)

- · Neuronal Function Group
- (T.K.Hensch/K.Mori/Y.Yoshihara/R.Yano)
- Neuronal Circuit Mechanisms Group
- (M.Ito/H.Niki/T.Knopfel)
- Cognitive Brain Science Group
- (K. Tanaka/M. Tanifuji/A.A. Ioannides/K.S. Rockland) Developmental Brain Science Group
- (K.Mikoshiba/H.Okamoto/T.Furuichi/K.Kajiwara) Molecular Neuropathology Group
- (N.Nukina/K. Yamakawa/R. Takahashi/T.Okamoto)
- Aging and Psychiatric Group (T.C.Saido/A. Takashima/T. Yoshikawa/T. Kato)
- **Recovery Mechanisms Group**
- (M.Miura)
- Brainway Group
- (G.Matsumoto/M.Ichikawa)
- Brain-Style Intelligence Group (M.Sugeno/Y.Yamaguchi/J.Tani)
- Brain-Style Information Systems Group
- (S.Amari/S.Tanaka/A.Cichocki/C.V.Leeuwen) · Advanced Technology Development Center
- (C.Itakura/A.Miyawaki/T.Hashikawa/S.Itohara/M.Ogawa)
- Application forms : visit our web site http://summer.brain.riken.go.jp/ or send inquiries to Summer Program Organizing Committee, BSI, RIKEN 2-1 Hirosawa, Wako-shi, Saitama 351-0198, JAPAN

E-mail : info@summer.brain.riken.go.jp Fax : +81-48-462-4914

LECTURE COURSE (PLAN B)

June 28 - July 6

'Brain Dysfunctions : Molecular and Cellular Bases' The purpose of the course is to present basic concepts as well as cutting edge research that will promoto the understanding of neurological and psychiatric disorders at multiple levels, including molecular, cellular and systems. The lectures will be given in special reference to the basic mechanisms regulating the normal function and development of the nervous systems. Individual lecturers will provide the basics of their field and advanced tonics.

(Lecturers)

William C. Mobley (Stanford University) Junving Yuan (Harvard Medical School) Don W. Cleveland (University of California San Diego) Masashi Yanagisawa (University of Texas Southwestern) Kenneth S. Kosik (Harvard Medical School) Peter H. St. George-Hyslop (University of Toronto) Nobuvuki Nukina (RIKEN) Shoji Tsuji (Niigata University) Takeshi Iwatsubo (University of Tokyo) Peter Stern (Science) Kuniyoshi L. Sakai (University of Tokyo) Nobutaka Hirokawa (University of Tokyo) Takeshi Yagi (Osaka University) Katsuhiko Mikoshiba (RIKEN/University of Tokyo) Hideyuki Okano (Osaka University) Derek van der Kooy (University of Toronto) Toru Nishikawa (Tokyo Medical and Dental University) Ulrike Heberlein (University of California San Francisco) Martin C. Raff (University College London)

POSITIONS OPEN

FACULTY POSITION BIOMEDICAL ENGINEERING

The Department of Chemical Engineering at the Florida A&M University-Florida State University College of Engineering invites applications for several tenure-track faculty positions in its newly founded graduate degree program in biomedical engineering. The College is a joint entity of Florida State University (FSU) and Florida A&M University (FAMU), located in Tallahassee, Florida. A Ph.D. or M.D./ Ph.D. in biomedical engineering, medical sciences, or a related discipline is required. Rank is open and candidates must demonstrate a strong commitment to building both the educational and research components of the recently approved B.S./M.S./Ph.D. degree programs in biomedical engineering. Senior applicants must have a record of national distinction in biomedical engineering or related discipline. The possibility exists for highly qualified senior applicants to be nominated for a Florida State University Eppes endowed professorship. Of particular interest are those candidates with exceptional background in tissue engineering, metabolic engineering, or intercellular transport processes. The Department has a Special Opportunity Award from the Whitaker Foundation, an NSF-funded NMR/MRI system for molecular transport and microimaging studies and new laboratory and office space dedicated to biomedical engineering research. Excellent opportunities exist for in-teractions with the National High-Magnetic Field Laboratory, the FAMU College of Pharmacy and Pharmaceutical Sciences, and the FSU Institute of Molecular Biophysics, as well as for affiliation with the new College of Medicine at FSU. Qualified applicants should send a letter of application; current curriculum vitae; a statement of research and teaching interests; and the names and contact information of three references by March 1, 2001, to: Dr. Bruce R. Locke, Chair of Faculty Search Committee, Department of Chemical Engineering, FAMU-FSU College of Engineering, 2525 Pottsdamer Street, Tallahas-see, FL 32310. Further information can be obtained at website: http://www.eng.fsu.edu/departments/ chemical/index.html. FAMU-FSU is an Affirmative Action/Equal Employment Opportunity Employer. Women, minorities, veterans, and persons with disabilities are encouraged to apply.

DIRECTOR OF NEUROBIOLOGY/ NEUROANESTHESIA RESEARCH Division of Neurological Anesthesiology

The Department of Anesthesiology at the College of Physicians and Surgeons of Columbia University, New York, seeks a NEUROANESTHESIOLO-GIST with a major interest in research or a RE-SEARCH SCIENTIST with a Ph.D. background to lead neurobiology/neuroanesthesia research and to work alongside the Clinical Director. The applicant must have demonstrated the ability to secure NIH funding. The Division has nine faculty plus one Neuroanesthesia Fellow. It is responsible annually for more than 2,200 anesthetics in four operating rooms; more than 300 anesthetics in two invasive neuroradiology suites; and more than 500 anesthetics for electroconvulsive therapy. The Department has newly renovated state-of-the-art facilities for both basic and clinical investigation. There are many opportunities for independent and collaborative research both within and outside the Division and Department

The Department of Anesthesiology at Columbia University currently employs 68 faculty members and 61 residents and Fellows. A major goal of the academic department is the development of academic faculty within subspecialty divisions. We have an NIH T32 training grant basic science training Fellowship program for Physician Scientists in anesthesiology. Please send letter and curriculum vitae to: **Marga**-

Please send letter and curriculum vitae to: Margaret Wood, M.D., Chairman, Department of Anesthesiology, College of Physicians and Surgeons of Columbia University, 622 West 168th Street (PH505), New York, NY 10032. E-mail: mw218@ columbia.edu. Columbia University is an Affinative Action/ Equal Opportunity Employer.

POSITIONS OPEN

CHAIR, DEPARTMENT OF PATHOLOGY University of North Dakota School of Medicine and Health Sciences

The University of North Dakota School of Medicine and Health Sciences invites applications and nominations for the position of **CHAIR** in the Department of Pathology. We seek an outstanding Medical Scientist with a strong research record in pathology who has a proven ability to obtain extramural support. All appropriate areas of research will be considered, although research in the neurosciences or oncology would complement existing programs.

The Chair will oversee a department of 12 faculty members. The successful candidate will be expected to broaden and strenthen research within the Department and to participate in medical, graduate, and allied health education; therefore, must be committed to excellence in teaching and research. The applicant should also possess interpersonal and leadership skills in mentoring faculty, directing students, and performing administrative duties.

This position does not include an active clinical pathology practice, the focus being on teaching, research, and administration. The Department is heavily involved in the design and implementation of undergraduate medical education. The Department presently directs both graduate and undergraduate programs in clinical laboratory science, including a distance education modality and the Cytotechnology Program. The new Chair may elect whether or not to continue to direct these programs.

Further information is available at website: http://www.med.und.nodak.edu.

Review of applications will begin immediately and the search will remain open until the position is filled. The position will be available July 1, 2001. Applicants should submit detailed curriculum vitae; statement that addresses administrative philosophy, research goals, and teaching interests; and the names and addresses of three references to:

James E. Mitchell, M.D. Professor and Chair, Department of Neuroscience Chair of the Search Committee University of North Dakota School of Medicine and Health Sciences 1919 Elm Street North Fargo, ND 58103

The University of North Dakota is an Equal Opportunity/ Affirmative Action Institution.

BIOCHEMICAL GENETICS: The Department of Pediatrics at the University of Wisconsin-Madison is recruiting a Biochemical Geneticist with a commitment to developing an independent research program and an interest in providing biochemical genetics clinical service. This is a tenure-track position at the AS-SISTANT PROFESSOR level in the Division of Genetics and Metabolism. It is one of four positions currently available in medical genetics at the University of Wisconsin-Madison. It offers opportunities for on-site collaboration with nationally recognized researchers in gene therapy and a wide range of other areas of research in child development through an affiliation with the Waisman Center. Opportunities also exist for teaching pediatrics residents, medical students, and graduate and undergraduate students in genetics. Madison is a thriving, progressive university community and state capitol, ranked number one in "livability" by Money Magazine in 1996 and 1998. Candidates must be Board-certified or Board-eligible in pediatrics and biochemical genetics. If interested, please send a letter and curriculum vitae to: David Wargowski, M.D., Associate Professor, Department of Pediatrics, University of Wisconsin Clinical Genetics Center, 1500 Highland Avenue, Madison, WI 53705-2280. FAX: 608-263-0530. E-mail: wargowski@waisman.wisc.edu. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.

POSITIONS OPEN

ASSOCIATE DEAN FOR ACADEMIC PROGRAMS College of Agricultural, Food, and Environmental Sciences University of Minnesota

The University of Minnesota seeks an outstanding individual to provide leadership and vision for education as Associate Dean for Academic Programs in the College of Agricultural, Food, and Environmental Sciences (COAFES). General administrative and leadership responsibility for undergraduate, continuing, and distance education including curricula, instruction, admissions, student services, scholarships, career services, faculty development; shared responsibility for recruiting, international student programs, and graduate and professional program coordination. Initial three-year appointment; annual reappointment based on review. Required qualifications include earned Doctorate in a field related to the academic departments of COAFES and five years of postdoctoral experience in postsecondary education. Desired qualifications include administrative and/or leadership experience in educational programs; demonstrated understanding of learning environment in collegiate units; demonstrated understanding of food, agriculture, and the environment in context of land grant mission; experience with interdepartmental and/or intercollegiate education programs; demonstrated ability to communicate effectively. See complete position description and additional information about COAFES at website: http://www.coafes. umn.edu/. Completed application will include onepage statement of career goals; two-to-three-page essay titled, "Academic Programs in the College of Agricultural, Food, and Environmental Sciences in 2010"; curriculum vitae; and names, addresses, and telephone: numbers of three references. Review of applications begins January 16, 2001. Send nominations and applications to: Dr. Gary Gardner, Chair, Search Advisory Committee, c/o COAFES Student Affairs, 120 Biosystems and Agricultural Engincering, 1390 Eckles Avenue, St. Paul, MN 55108-1030. Telephone: 612-624-3606. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

COLLEGE OF NATURAL SCIENCES AND MATHEMATICS Science Education Program California State University, Fullerton

The Science Education Program at California State University, Fullerton, has an opening for a tenure track position at the ASSISTANT or ASSOCIATE PROFESSOR level beginning fall 2001. Teaching responsibilities include science education courses for K-12 preservice teachers, supervising teacher interns, supervising graduate students, and teaching introductory courses in one of the science disciplines (biology, chemistry, Earth/space science, and physics). Preference will be given to individuals who have successful records of teaching at the precollege and/or college levels and a strong record of proposal development and publication in science education. Demonstrated excellence in teaching and scholarly and creative activities will be given extra consideration. The Science Education program offers a Master of Arts in Teaching Science degree for both elementary and secondary teachers. Approximate salaries: Assistant Professor, \$45,456 per annum; Associate Professor, \$52,248 per annum. Curriculum vitae, research plans, twopage summary of teaching philosophy, and the names and contact information for three references should be sent to: David Fromson, Chair, Search Com-mittee, College of Natural Sciences and Mathematics, California State University, Fullerton, P.O. Box 6850, Fullerton, CA 92834-6850. Website: http://nsm.fullerton.edu/about.htm. Appli-cation deadline: February 26, 2001.

Cal State Fullerton is an Affirmative Action/Equal Opportunity/Title IX/Americans With Disabilities Act Employer. Minorities and women are encouraged to apply.

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- **3. E-mail** your coupon information in the body of a message to: sciencesurvey@aaas.org

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POSITIONS OPEN



PHARMACOLOGY

CHAIRPERSON, Pharmacology: The Department of Pharmacology at Temple University School of Medicine is inviting applications from qualified Sci-entists. Applicants for this leadership position should hold Ph.D. degree and/or equivalent terminal degree. Preference will be given to an active Investigator with an outstanding record of academic accomplishments. Expertise in neuropharmacology preferred. Successful candidates should possess experience in leadership; broad academic and teaching interests; and the ability to develop strong, extramurally funded research programs. Salary and rank commensurate with qualifications and experience. Salary/benefits highly competitive. Qualified individuals should send their curriculum vitae to: Ms. Tina Callaghan, Administrative Coordinator, Office of the Dean, Temple University School of Medicine, 3401 North Broad Street, Philadelphia, PA 19140. Temple University School of Medicine is an Equal Opportunity Employer and strongly encourages applications from women and minorities

SIGNAL TRANSDUCTION DEPARTMENT OF NEUROSCIENCE

Applications are invited to fill a tenured or tenuretrack position at the ASSOCIATE PROFESSOR level, although ASSISTANT PROFESSOR candidates with outstanding records will be considered (position availability: 1 September 2001). The appointee will be expected to develop and maintain a funded research program focusing on the biochemical and molecular analysis of signal transduction mechanisms and their effects on synaptic physiology or neuronal function generally. Opportunities for collaborative research efforts are widespread in the Department and the large neuroscience community in the University and are strongly encouraged. Teaching at both the graduate and undergraduate levels is expected. Applicants should send curriculum vitae, a one-page statement of research goals, three representative publications, and three letters of recommendation to:

Faculty Search Committee Department of Neuroscience University of Pittsburgh Pittsburgh, PA 15260

All submitted materials will be reviewed promptly, and applications are invited until the job is filled. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups underrepresented in academia are especially encouraged to apply.

ASSISTANT or ASSOCIATE PROFESSOR in pharmacogenomics, Penn State College of Medicine, Hershey, Pennsylvania. This tenure-track faculty position is available in the Department of Pharmacology. Applicants must possess a Ph.D., M.D., or M.D./ Ph.D; have postdoctoral experience; and a strong background in pharmacogenetics and/or pharmacogenomics. The successful applicant will be expected to contribute to the development of new genomic and/or proteomic approaches to the study of molecular medicine and pharmacology and will interact with faculty of the Life Sciences Consortium at Penn State University to strengthen emerging genomic efforts. Participation in medical and graduate student teaching is required. Salary, start-up funds, and laboratory space will be commensurate with qualifications and experience. Applications must be received by February 1, 2001. Please send curriculum vitae, statement of research interests, and the names and address-es of three references to: **Chair, Pharmacogenomics** Search Committee, Department of Pharmacology, H078, Position Number: S-9691, Penn State College of Medicine, 500 University Drive, Hershey, PA 17038-2390. Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

DIRECTOR OF MOLECULAR MEDICINE PROGRAM. Cleveland State University (CSU), in association with the Cleveland Clinic Foundation (CCF), invites applications for a tenured ASSOCI-ATE PROFESSOR position as Director of the new joint Molecular Medicine Program beginning fall 2001. The CSU/CCF Molecular Medicine Program will expand the existing joint doctoral programs in regulatory biology, clinical-bioanalytical chemistry and applied biomedical engineering. The primary responsibility of the Director is to guide the development of the new program while maintaining an independent research program in an area related to molec-ular medicine at CSU. The Director will be appointed in the appropriate department at CSU and will hold a joint appointment at CCF's Lerner Research Institute. The applicant must have a Ph.D. and/or M.D. in a field related to biomedical sciences including but not limited to biochemistry, chemistry, molecular and cellular biology, chemical engineering, or biomedical engineering. Additionally, the successful applicant must demonstrate proven ability to develop an externally funded, independent research program and to effectively teach courses in his/her specialty. Research expertise in areas related to molecular medicine that complements existing research at CSU and CCF is especially desirable. Preference will be given to individuals with administrative experience in a research or academic setting. Review of applications will begin on January 30, 2001, and will continue until the position is filled. Send curriculum vitae, a description of ongoing research projects and current funding, a statement of teaching experience, and arrange for three letters of recommendation to be sent to: Dr. Lily Ng, Chair, Molecular Medicine Program Search Committee, Department of Chemistry, Cleveland State University, Cleveland, OH 44115. Telephone: 216-687-2467; FAX: 216-687-9298; e-mail: l.ng@ csuohio.edu. Cleveland State University is an Affirmative Action/Equal Opportunity Employer committed to nondiscrimination. Minorities/Females/Disability/Veterans encouraged.

The Biology Department at Southern Connecticut State University in New Haven, Connecticut, invites applications for a full-time, tenure-track **ASSIS-TANT PROFESSOR** position starting in fall of 2001. We seek a Biologist with expertise in plant physiology and marine algae. The individual will teach an undergraduate course in plant physiology, general microbiology for health sciences, and a graduate course in marine algae. Teaching an advanced course in the applicant's area of specialty will be encouraged. Minimum requirements for candidates include a Ph.D. in biology and a strong commitment to teaching. The successful candidate will teach 12 weighted

The successful candidate will teach 12 weighted contact hours a week; hold five office hours; and actively participate in our general biology program, engage in continued professional development, and assist with departmental and university service. Preference will be given to a Plant Physiologist who will set up and run a plant physiology–plant molecular biology laboratory and help develop our undergraduate and Master's level research students.

Applicants should submit (1) a letter of application highlighting relevant experience and research interests; (2) a résumé; (3) official undergraduate and graduate transcripts; and (4) the names, addresses, and telephone numbers of five recent professional references. Please have all materials mailed to: Dr. Dwight G. Smith, Chairman, Biology Department, Southern Connecticut State University, New Haven, CT 06515. Closing date for applications is March 15, 2001.

POSITION ANNOUNCEMENT

DEVELOPMENTAL BIOLOGIST/ASSISTANT PROFESSOR: tenure track; August 2001. To teach animal development, animal physiology, and general biology; conduct scholarly activities; and direct undergraduate research. Screening of applicants will continue until the position is filled. Qualifications, application information, and job description may be obtained at website: http://www.science.lander. edu/jobs.html. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

CHAIR, DEPARTMENT OF MOLECULAR SCIENCES The University of Tennessee Health Science Center Memphis, Tennessee The College of Medicine of the University of Ten-

The College of Medicine of the University of Tennessee Health Science Center seeks nominations and applications for the Chair of the Department of Molecular sciences. This new department has been formed from the existing departments of (1) biochemistry and (2) microbiology and immunology and will have more than 30 tenure-track faculty positions with substantial space in a modern research building. Applicants should hold the Ph.D. or M.D. degree and possess an outstanding record of accomplishment in basic research and education of both graduate and professional degree students.

Applicants are requested to send curriculum vitae and the names and addresses of three references along with a letter stating their interest to:

Leonard R. Johnson, Ph.D. Chairman, Molecular Sciences Advisory Committee The University of Tennessee Health Science Center 800 Madison Avenue P.O. Box 63647 Memphis, TN 38163

The University of Tennessee is an Equal Opportunity/ Affirmative Action/Title VI/Title IX/Section 504/Americans With Disabilities Act/Age Discrimination in Employment Act Employer.

CANADIAN RESEARCH CHAIR IN PLANT NATURAL PRODUCTS Departments of Botany and Chemistry The University of British Columbia

The University of British Columbia is conducting a search for applicants for Canadian Research Chair in Natural Products research. The Canadian Research Chair program has been established by the Canadian Federal Government with the purpose of attracting and/or retaining outstanding researchers within the Canadian university system. This prestigious Chair is for a junior-level person (ASSISTANT PROFESSOR level) who will be jointly appointed in the Departments of Botany and Chemistry. The successful candidate will be expected to establish a vigorous research program in plant or fungal natural products research. We will consider excellent applicants in a broad range of areas characterized as plant natural products. We particularly welcome applications in the areas of natural product biosynthesis, metabolic engineering, chemical ecology, biotechnology, and genomics. He/she will be expected to participate in the education of students at the undergraduate and/or graduate level.

Interested individuals should send curriculum vitae, list of publications, description of proposed research and interests, and the names of three references to: Carl Douglas, Head, Department of Botany, 3529-6270 University Boulevard, Vancouver, BC V6T 1Z4 Canada. Screening of applicants will begin March 1, 2001, and continue until the position is filled. The University of British Columbia hires on the basis of merit and is committed to Employment Equity. All qualified persons are encouraged to apply.

Tenure-track FACULTY APPOINTMENT available at any academic rank. Applications will be accepted until the position is filled. In responding, please send curriculum vitae with a description of plans for an independent research program and request three references to send letters to: Dr. Gerry Litwack, Chairman, Department of Biochemistry and Molecular Pharmacology, Jefferson Medical College, Thomas Jefferson University, 850 BLSB, 233 South 10th Street, Philadelphia, PA 19107. Thomas Jefferson University is an Equal Opportunity Employer.

Endowed Chair in Genomics College of Life Sciences and Agriculture

The College of Life Sciences and Agriculture at the University of New Hampshire is soliciting applications for the position of the Hubbard Professor and Endowed Chair in Genomics. This position will be an integral part of the center for genomic studies currently being established within the College of Life Sciences and Agriculture at UNH. The Hubbard Professor will be associated with an appropriate department of the College. Candidates for the Endowed Chair should have qualifications to join the College at the rank of Professor, should be nationally and/or internationally recognized for accomplishments in an area of functional genomics and should possess a record of excellence in teaching and research. The precise area of research is less important than demonstrated potential to enhance the quality and strength of genomic/proteomic-based research at UNH. Special consideration will be given to candidates with research excellence in areas of genomics that compliment existing research at UNH, including Marine and Freshwater Biology, Environmental Sciences, Plant & Microbial Biology and established/emerging model organisms. The incumbent will be expected to maintain an innovative externally funded research program, to contribute to undergraduate/graduate education, and to provide leadership in furthering the goals of the College as well as the institute for genomic studies. A strong record of excellence in teaching, research, leadership and collaboration will be required. A competitive package for salary, start up funds and space is available.

Nominations or applications should be accompanied by curriculum vitae. Applications should also include a letter of interest and the names, phone numbers and email addresses of five individuals who could serve as references. Review of applications will begin on February 1, 2001 and continue until the position is filled. Send applications or nominations to: Dr. William R. Trumble, Search Committee Chair, Taylor Hall, University of New Hampshire, Durham, NH 03824.

UNH is committed to excellence through diversity among its faculty and strongly encourages women and minorities to apply.

GRADUATE FELLOWSHIPS CENTER FOR THE STUDY OF EVOLUTION AND THE ORIGIN OF LIFE UCLA

ORIGIN OF THE UNIVERSE... FORMATION OF EARTH... BEGINNINGS OF LIFE... EVOLUTION OF THE BIOSPHERE... EMERGENCE OF HOMO SAPIENS... Astronomy, Geology, Paleontology, Molecular & Microbiology, Exo-Cosmo-Astrobiology!!

CSEOL invites applications for five graduate fellowships for 2001-2003. In addition to support provided Fellows by UCLA departments, CSEOL will grant each Fellow a stipend of \$5,000 per year for each of the first two years of graduate study, with no teaching or other duties. Stipends may be used for any purpose the Fellow deems appropriate — travel, lodging, attendance at scientific meetings, purchase of books, computers, research equipment — for any purpose, without restriction. Fellows are included in a select group of graduate students invited to interact with Center faculty in a weekly dinner/ seminar/discussion series. Applicants should be planning to carry out doctoral research under the direction of a CSEOL faculty member in a subject relating to the ORIGIN and/or EVOLUTION of the Cosmos, Solar System, planet Earth, the environment, living systems, humans, life elsewhere in the Universe — with particular emphasis on:

> When and how did life begin? How did life evolve so far, so fast, so early?

Faculty are members of the UCLA Departments of Anthropology, Atmospheric Sciences, Biology, Chemistry & Biochemistry, Computer Science, Earth & Space Sciences, Microbiology, Physics & Astronomy; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute.

Prospective Fellows must apply (preferably, by 12 February 2001) both to an academic department and to *CSEOL*. For application forms and a list of *CSEOL* members, contact: *CSEOL Fellows Committee Geology Building,* Room 5687, University of California, Los Angeles, Los Angeles, CA 90095-1567, Telephone: (310) 825-1170 FAX: (310) 825-0097. E-mail: Schopf@ess.ucla.edu or Mantonya@ess.ucla.edu



Division of Engineering and Applied Sciences

ASSOCIATE DEAN FOR ADMINISTRATION

The Division of Engineering and Applied Sciences (DEAS) is the locus of the study of engineering, technology and multidisciplinary applied science at Harvard University. DEAS seeks an Associate Dean for Administration who will act as the implementing partner of the Dean. We invite applications from seasoned, innovative managers with demonstrated success supporting research and teaching programs.

Harvard has recently made substantial new investments in science and engineering and DEAS is playing an increasingly more central role in teaching and research efforts, reaching across fields and disciplines both within and outside Harvard. DEAS provides instruction in three undergraduate concentrations and enrolls approximately 200 graduate students. Its 61 faculty members and almost 250 research and general staff conduct about \$25 million in sponsored research each year. The annual operating budget totals approximately \$45 million and the capital budget (not including anticipated construction projects) runs between \$1 and \$4 million annually. New faculty members are being hired at a rate of 4-6 per year. New interdisciplinary programs are being initiated in information technology, biomedical engineering, and other fields. A state-of-the-art computer science and electrical engineering facility has just opened.

The Associate Dean reports to the DEAS Dean and serves as the Division's chief operating officer, developing and overseeing the implementation of administrative policies. A successful candidate is likely to have at least ten years of experience in managing support systems for scientific research and teaching including facilities, financial, human resource, environmental safety, grants and contracts and related systems. The ability to communicate effectively with individuals at many levels of responsibility is essential. Applicants should be comfortable with the techniques and instrumentation used in research laboratories. While the position requires outstanding administrative skills, a candidate with a strong background in physical sciences or engineering at the Ph.D. level is preferred.

The search is scheduled to conclude in the winter or early spring of 2000-01 with a starting date as soon thereafter as possible. Salary is competitive. Send inquiries, referrals, and resumes with a cover letter and in confidence to: Jerry Pieh, Internal Box 2172, Isaacson, Miller, 334 Boylston Street, Suite 500, Boston, MA 02116. Tel: 207-443-2256; Fax: 207-442-0846; Email: jpieh@imsearch.com

Harvard University is an affirmative action, equal opportunity employer.

www.deas.harvard.edu

POSITIONS OPEN



The Louisiana State University Health Sciences Center Gene Therapy Program in conjunction with the Louisiana Gene Therapy Research Consortium, is recruiting for two faculty positions at the ASSIST-ANT PROFESSOR level in the Departments of Medicine Gene Therapy Program. Areas of particular interest are in stem cells and animal modeling of gene delivery/therapy. Please send curriculum vitate to: Dr. Jay K. Kolls, Director, LSUHSC Gene Therapy Program, Room 601, CSRB, 533 Bolivar Street, New Orleans, LA 70112. E-mail: jkolls@lsuhsc. edu. LSUHSC is an Equal Employment Opportunity/Affimative Action Employer.

TENURE-TRACK POSITION MOLECULAR EPIDEMIOLOGY Laboratory of Human Carcinogenesis

The Laboratory of Human Carcinogenesis (LHC), Division of Basic Sciences, National Cancer Institute, National Institutes of Health, has a long tradition of excellence in the investigation of the molecular carcinogenesis and epidemiology of human cancer. The Laboratory now invites applications for a tenure-track position to study the molecular epidemiology of human cancer. The applicant should have previous postdoctoral experience; a substantive record of publications in quality, peer-reviewed journals; and the potential to develop an independent research program that utilizes basic research discoveries to investigate gene-environment interactions in human carcinogenesis.

This position is available for a Ph.D. or M.D. with a salary commensurate with education and experience. A one-or-two-page statement of research interests and goals should be submitted in addition to three letters of recommendation and curriculum vitae to:

Ms. Shirley Swindell Administrative Laboratory Manager LHC, DBS, NCI Building 37, Room 2C01 Bethesda, MD 20892-4255 Telephone: 301-496-2048 FAX: 301-496-0497 E-mail: swindels@exchange.nih.gov

Applications must be postmarked by March 1, 2001. NIH is an Equal Opportunity Employer.

ANNOUNCEMENT: FACULTY JOB OPENING Department of Molecular Pharmacology Stanford University

The Department of Molecular Pharmacology at Stanford University School of Medicine invites applications for a tenure-track position at the **ASSIST**-**ANT PROFESSOR** level. The appointee will interact with other faculty members who have research interests in stem cell biology, signal transduction, regulation of gene expression, protein structure, functional genomics, and combinatorial biochemistry. The appointee will be expected to develop a creative, independent research program in basic science investigations of mechanisms of disease. The Department of Molecular Pharmacology plays a central role in the new Sir Norman Foster-designed Center for Clinical Sciences Research building.

Candidates should have a Ph.D. and/or M.D. degree and postdoctoral research experience. Candidates are encouraged to apply by January 15, 2001, with curriculum vitae, a description of future research plans, and arrange to have three letters of reference **FAXED** (650-736-0080) or mailed to:

Helen M. Blau, Ph.D. Chair, Department of Molecular Pharmacology 269 Campus Drive, CCSR 4215 Stanford University School of Medicine Stanford, CA 94305-5175

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

POSITIONS OPEN

RESPIRATORY PHYSIOLOGIST: The Department of Physiology and the Respiratory Sciences Center at The University of Arizona, College of Medicine, invite applications for a tenure-track position at the rank of ASSISTANT PROFESSOR or at the ASSOCIATE level for exceptionally well-qualified candidates. Preference will be given to candidates who use functional genomics and/or animal models to investigate mechanisms regulating airway function or bronchial or pulmonary circulation as they pertain to allergic inflammation and asthma. The successful candidate will be expected to establish a vigorous, independent research program and contribute to teaching in graduate cell and medical systems physiology courses. Qualifications include the Ph.D., M.D., or equivalent and two or more years of postdoctoral training. Candidates with demonstrated experience in teaching and success in acquiring independent funding are especially encouraged to apply. Position is available beginning July 1, 2001. Review of applications will begin in February 2001 and continue until the position is filled. Submit a letter of application, a summary of teaching and research goals, curriculum vitae with the names of three references, and three reprints to: Reference Job Number 994245: Janis M. Burt, Ph.D., Head of the Search Committee, Department of Physiology, The Univer-sity of Arizona, Tucson, AZ 85724-5051. More information can be found at websites: http:// Department.physiol.arizona.edu/ and http:// www.resp-sci.arizona.edu/. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Women/Disabled/Veterans

FACULTY POSITION IN CELL BIOLOGY DEPARTMENT OF BIOLOGY University of Michigan

The Department of Biology at the University of Michigan solicits applications for a **TENURE**-**TRACK FACULTY POSITION** in cell biology. We seek an individual who uses a wide range of genetic, biochemical, and molecular approaches to study fundamental problems in cell biology. Qualified applicants must have a Ph.D. in biology, cell biology, molecular biology, or a related field as well as postdoctoral experience. The successful candidate will likely work with *Sacharomyces cerevisiae* and join an active and expanding group of Cellular and Molecular Biologists interested in a variety of fundamental biological questions. In addition to establishing a productive research program, the successful candidate will be expected to participate in undergraduate and graduate teaching programs of the Department. To apply, send curriculum vitae; copies of reprints; brief summaries of present research and future research plans and teaching interests; and arrange to have three letters of reference sent to:

Chair, Department of Biology University of Michigan Natural Sciences Building Ann Arbor, MI 48109-1048

Review of applications will commence February 1, 2001.

The University of Michigan is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR GRADUATE PROGRAM IN ASTROBIOLOGY University of Washington, Seattle

Tenure-track position in any area bearing on astrobiology, the study of life on Earth in a cosmic context and of the possibility of extraterrestrial life. We particularly seek persons committed to interdisciplinary and quality teaching. Candidates may sit in any of the following departments: Astronomy, Atmospheric Sciences, Botany, Chemistry, Geological Sciences, Geophysics, Genetics, Zoology. Full information on our program and this position is available at website: http://Departments.washington.edu/astrobio/ available_positions.html or from: W. T. Sullivar; Telephone: 206-543-7773; e-mail: woody@astro. washington.edu. Deadline: 31 January 2001. Intended start: September 2001. Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

Université de Montréal

CHAIRMAN POSITION IN PHYSIOLOGY

The Faculty of Medicine at the Université de Montréal is searching for a chairman of its Physiology Department. This department harbors several groups with strong research programs in neurosciences, membrane biology, electrophysiology, cardiovascular regulation, and motor control and biomedical engineering.

Functions: The Department is also involved in the teaching of physiology in both undergraduate (M.D. and B.Sc.) and postgraduate (M.Sc., Ph.D., and residency) programs of the Faculty of Medicine. More details can be found on the Department website: http://www.physio.umontreal.ca/.

It is expected that in addition to playing a leadership role in the develpment of the Department activities, the candidate will establish his own independent research program within the Department. Starting date: June 1, 2001. Candidates should send complete curriulum vitae before February 16, 2001, to:

Selection Committee Chair Dr. Michel Bouvier, Chairman Department of Biochemistry Université de Montréal P.O. Box 6128, Station A Montreal, QC H3C 3J7 Canada

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University is committed to Equal Employment Opportunity for women.

PHYSIOLOGY POSITION

The Department of Biomedical Sciences of the Ohio University College of Osteopathic Medicine is seeking to fill a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level to begin by fall of 2001. Primary responsibilities are to teach organ system physiology in a clinically oriented, innovative medical curriculum and to develop an externally funded research program. Priority will be given to individuals with expertise in renal or gastrointestinal physiology. A Ph.D. (or equivalent) and a minimum of two years of postdoctoral training are required. The 11-month salary will be commensurate with experience and accompanied by an excellent benefits pacakge and start-up funds. Review of appli-cations will begin February 15, 2001. Applications will be accepted until the position is filled. Submit a brief statement of research and teaching goals, curriculum vitae, representative reprints, and three letters of recommendation to: Richard E. Klabunde, Ph.D., Search Committee Chair, Department of Biomedical Sciences, Ohio University College of Osteopathic Medicine, Irvine 304, Athens, OH 45701. E-mail: klabunde@ohio.edu; Department website: www.oucom.ohiou.edu/dbms. Ohio University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION CELL BIOLOGY

The Department of Anatomy and Cell Biology and Division of Obstetrics/Gynecology invite applications for a tenure-track position in cell biology. Appointments will be made at the **ASSISTANT PRO-FESSOR** level. Applicants must have a Ph.D., M.D., or equivalent degree with demonstrated ability to conduct independent research. Although candidates having expertise in any area of cell biology will be considered, preference will be given to those whose research is broadly related to cardiovascular areas. The successful applicant will teach in the medical and graduate schools and support his/her laboratory efforts through extramural grants. Attractive start-up funds and excellent research facilities are available. Curriculum vitae; a brief description of previous and anticipated research; and the names of three references should be submitted by February 15, 2001, to: Dr. M.A.Q. Siddiqui, Professor and Chairman, Department of Anatomy and Cell Biology, State University of New York Downstate Medical Center, 450 Člarkson Avenue, Brooklyn, NY 11203.

Endowed Programs for

Fellows, Faculty and Visiting Professors in STEM CELL RESEARCH

The Tulane Center for Gene Therapy offers a series of endowed programs for research in stem cell biology and use of stem cells in gene therapy. The Center is supported by a five-year program funded by Tulane University, HCA-the Healthcare Company, and the Louisiana Gene Therapy Research Consortium, Inc. The Center provides a series of core facilities that include DNA sequencing, microarray assays, deconvolution microscopy, laser assisted microdissection, protein mass spectrometry, biosensor assays of ligand binding, CD spectropolarimetry, and FACS. In addition, a core laboratory is available at the affiliated Tulane University Primate Research Center and there is access to an NIH-funded General Clinical Research Center. A microPET core for imaging of small animals will be available within the year.

Postdoctoral Fellowships: Highly competitive stipends are offered for up to 3 years. Successful candidates should be graduates of well-recognized institutions and have an excellent command of English.

Faculty Positions: Tenure-track appointments are available at the level of assistant professor. The program is fully funded to provide salary, laboratory space, access to graduate students and up to four years of support for a postdoctoral fellow, a technician and research supplies for each faculty member.

Sabbatical Year Program for Visiting Professors: Positions provide up to one year of full support for salary and resarch expenses for highly qualified scientists:

Send (1) curriculum vitae, (2) brief summary of research interests, and (3) two or more letters of recommendation to Dr. Darwin J. Prockop, Director, Center for Gene Therapy, Tulane University Health Sciences Center, 1430 Tulane Avenue, SL-99, New Orleans, LA 70112; Fax (504) 988-7710; E-mail: dprocko@tulane.edu

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ANNOUNCEMENTS



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POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS Department of Bioengineering The University of Utah

Applications are invited for two junior-level tenuretrack positions in the areas of biointeractive materials. Candidates must have an earned Doctorate and a strong physical science and engineering background with a special biological direction to their research. We are seeking candidates with demonstrated expertise in one of the following three areas: (1) engineering of tissue scaffolding, (2) engineering of structural biomaterials, or (3) engineering of functional structures and devices.

Appointees will be expected to develop significant research programs and teach appropriate undergraduate and graduate courses. See website: www.bioen. utah.edu for further information.

Complete curriculum vitae, names of three references, and a brief career goals/objectives statement should be sent to: Dr. V. Hlady, Search Committee Chair, Department of Bioengineering, 50 South Central Campus Drive, Room 2480, Salt Lake City, UT 84112-9202. The current application review will continue until qualified candidates are selected.

The University of Utah, an Affirmative Action/Equal Opportunity Employer, encourages applications from women and minorities and provides reasonable accommodation to the known disabilities of applicants and employees.

BOSTON UNIVERSITY

The Department of Biomedical Engineering (BME) at Boston University anticipates several openings for faculty positions at all ranks in the following areas: micro- and nanobiosystems, cellular and subcellular engineering, and neuroengineering. Qualified candidates must have a Ph.D. degree in the relevant discipline.

Faculty are expected to develop a program of funded research in their area of expertise. The Department has 24 faculty members, approximately 90 graduate students, and 350 B.S. majors. Excellent opportunities exist for collaboration with colleagues in outstanding research centers at Boston University, at other universities/colleges, and with industry throughout the Boston area. For additional information on the College of Engineering and BME Department, visit the College's websites: http://www.bu.edu/ eng/ or http://bme.bu.edu.

Applicants should send their curriculum vitae to:

Dr. Kenneth R. Lutchen Chair, Department of Biomedical Engineering Boston University

44 Cummington Street Boston, MA 02215-2407 U.S.A.

Boston University is an Equal Opportunity/Affirmative Action Employer.

PH.D. RESEARCHER POSITION

ANESTHESIOLOGY RESEARCH. The University of California, Irvine, will be recruiting during the months of November 15, 2000, to January 15, 2001, for an ASSISTANT PROFESSOR, tenure track. Requirements include Ph.D. or M.D. with significant research training or experience. Molecular biology experience is an asset. Opportunities for experimental and clinical research and collaborations with the basic sciences, including biomedical engineering. Present departmental research areas include gas kinetics in anesthesia during nonsteady state (NIH-funded program, HL-42637, systems to cellular physiology) and the study of mechanisms of anesthesia and mem ory (includes PET and MRI imaging technologies). Duties will include teaching of residents and medical students. Apply to: Peter H. Breen, M.D., FRCPC, Vice Chair and Director of Academic Affairs, Search Committee Chair, Department of Anesthesiology, UCI Medical Center, 101 The City Drive South, Orange, CA 92868. FAX: 714-456-7702. UCI is an Equal Opportunity Employer committed to excel-lence through diversity.

POSITIONS OPEN

TENURE-TRACK POSITION IN APPLIED BIOSCIENCES GRADUATE PROGRAM

The University of Arkansas at Little Rock (UALR) invites applications for a **TENURE-TRACK FAC-ULTY POSITION** in the newly formed Applied Biosciences option in the Applied Science Graduate Program. We are looking for an energetic Scientist to develop an Interdisciplinary Genomics and Bioinformatics group as part of the rapidly expanding research community at UALR and at the University of Arkansas for Medical Sciences (UAMS). Technologies such as high-throughput sequencing and expression profiling (microarray technology) are desired to analyze the genome of plants, animals, and microorganisms in collaboration with other UALR and UAMS researchers.

The candidate should hold an earned Ph.D. in genetics, biochemistry, computer science, or a related field. Predoctoral candidates will be considered as well, with the stipulation that their Ph.D. research area is in bioinformatics and will be completed before employment commences. Preferences will be given to candidates with documented postdoctoral experience in bioinformatics. Applicants should have an understanding of the algorithms and tools for sequence analysis and homology searches, DNA clustering and alignment, and gene structure prediction. Programming experience and database design are desirable.

Applicants should send curriculum vitae, a publication list, a statement of research interests and teaching philosophy, and three letters of reference to: Dr. Roger Hawk, Chair, Department of Applied Science, University of Arkansas at Little Rock, 2801 South University Avenue, ETAS 575, Little Rock, AR 72204-1099. Telephone: 501-569-8010; FAX: 501-569-8020; e-mail: rmhawk@ualr.edu.

The University is an Affirmative Action/Equal Opportunity Employer. Under Arkansas law, all applicants are subject to disclosure. Persons hired must have proof of legal authority to work in the United States.

ASSISTANT PROFESSOR BIOLOGICAL SCIENCES STARK CAMPUS

A tenure-track position in biology at the rank of ASSISTANT PROFESSOR is available beginning in August 2001. Successful candidate should be able to teach a course in anatomy and physiology to allied health students, a junior-level course in human physiology, and courses in introductory biology. A demonstrable interest in teaching undergraduate students and evidence of teaching effectiveness are essential. The teaching laboratory is spacious and well equipped with tissue culture equipment, thermocycler, spectrophotometer, and fluorescence microscopes. The position also carries with it the expectation of scholarly activity and publications. Excellent research facilities and opportunities exist for collaboration at Kent campus. Ph.D. and/or other terminal degree is required. Salary is commensurate with qualifications.

Application screening will begin January 1, 2001, and will continue until position is filled. Send letter of application, curriculum vitae, transcripts, and three letters of recommendation by that date to:

> Dr. William G. Bittle, Dean Kent State University Stark Campus 6000 Frank Avenue N.W. Canton, OH 44720 E-mail: wbittle@stark.kent.edu Website: http://www.stark.kent.edu

RESEARCH POSITIONS: POSTDOC-TORAL and **RESEARCH ASSISTANT** to study (1) DNA repair proteins, (2) changes in gene expression by metal and PAH treatments using microarray technique (Affymetrix GeneChip®), and (3) roles of DNA damage and repair in human cancer. Experience in molecular biology, biochemistry, and genetics. Laboratories are located in a beautiful rural setting in Sterling Forest, Tuxedo, New York. Curriculum vitae and references by e-mail: tang@env.med.nyu.edu or by mail to: Dr. Moon-shong Tang, Department of Environmental Medicine, New York University, Tuxedo, NY 10987.

POSITIONS OPEN

The Biology Department at Swarthmore College invites applications for two different one-year faculty leave replacement positions at the **ASSISTANT PROFESSOR** level, each beginning September 2001. Applicants should have a Ph.D., teaching experience, and a strong commitment to undergraduate education. All biology courses at Swarthmore include laboratories. All application materials should be received by January 19, 2001.

ANIMÁL PHYSIOLOGY. Teaching is expected to include comparative animal physiology, an advanced undergraduate seminar in animal physiology, and participation in the Department's team-taught introductory biology course. Interested persons should submit curriculum vitae, three letters of recommendation, and a statement of teaching and research interests to: Dr. Sara Hiebert, Animal Physiology Search, Department of Biology, Swarthmore College, Swarthmore, PA 19081.

INVERTEBRATE ZOÓLOGY. Teaching is expected to include invertebrate biology, an advanced seminar in invertebrate zoology, and participation in the Department's team-taught introductory biology course. Interested persons should submit curriculum vitae, three letters of recommendation, and a statement of teaching and research interests to: Dr. Rachel Ann Merz, Invertebrate Zoology Search, Department of Biology, Swarthmore College, Swarthmore, PA 19081.

Swarthmore College is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

ASSISTANT PROFESSOR OF PHARMACOLOGY/TOXICOLOGY Mylan School of Pharmacy Graduate School of Pharmaceutical Sciences Duquesne University Pittsburgh, Pennsylvania

The Pharmaceutical Sciences Division seeks to fill a tenure-track position in pharmacology or toxicology beginning July 1, 2001. Applicants should possess a Ph.D. degree in pharmacology, toxicology, or a suitably related field. Postdoctoral experience is required. Successful candidates will be expected to teach in the entry-level Doctor of Pharmacy program and M.S./ Ph.D. graduate programs and to develop vigorous, creative, and extramurally funded research programs. Applicants should submit a letter of intent accompanied by curriculum vitae, a summary of research interests, and at least three letters of reference to: Dr. James K. Drennen III, Pharmaceutical Sciences Division, Graduate School of Pharmaceutical Sciences, Duquesne University, Pittsburgh, PA 15282. Telephone: 412-396-6315; FAX: 412-396-4660; e-mail: drennen@duq.edu. Applications will be accepted until the position is filled. For more information about the Mylan School of Pharmacy, the Graduate School of Pharmaceutical Sciences, and Duquesne University, visit the University's website: http://www.duq.edu/pharmacy. An Affirmative Action Employer.

HEAD, Southern Research and Outreach Center, Minnesota Agricultural Experiment Station, University of Minnesota, Waseca, Minnesota (website: http://sroc.coafes.umn.edu). CHIEF ADMIN-ISTRATIVE OFFICER reporting to Dean, College of Agricultural, Food, and Environmental Sciences and Director of the Minnesota Agricultural Experiment Station (website: http://www.maes.umn. edu). Ph.D. in agricultural science preferred; M.S. M.B.A. and strong agricultural leadership back-ground considered. Send curriculum vitae, statement of qualifications, one-page vision statement, names and telephone numbers of three references to: Dr. Burle Gengenbach, Chair, Search Committee, University of Minnesota, Department of Agrono my and Plant Genetics, 1991 Upper Buford Circle, St. Paul, MN 55108-1030. Telephone: 612-625-8761; e-mail: burle@umn.edu. Closing date: 15 February 2001.

The University of Minnesota is an Equal Opportunity Educator and Employer.

HEALTH SCIENCES CENTER

THE UNIVERSITY OF

RESEARCH ASSOCIATE

NIH-funded Postdoctoral Position (Research Associate) available immediately at the Arizona Liver Research Institute of The University of Arizona School of Medicine for an M.D., or a Ph.D. in Biology, Biochemistry, Chemistry or other related field. Candidates should be interested in research on topics related to regulation of gene expression. Strong experience in molecular biology (cloning) is desirable. Salary is negotiable. Send cover letter (referencing Job #994193), complete curriculum vitae & the names of three references to: Dr. Thomas D. Boyer, M.D., Director, Arizona Liver Research Institute, AHSC Medicine, P.O. Box 245136, 1501 N. Campbell Ave., Tucson, AZ 85724: OR fax to (520) 626-5975. Review of materials begins 1/19/01 and will continue until position is filled. For more information about this position, see www.hr.arizona.edu. The University of Arizona is an EEO/AA Employer -M/W/D/V.

GLOBAL OPPORTUNITIES

International Christian University Faculty Position Animal and Cell Physiology

An assistant/associate/full professor (tenure track) of Animal Physiology, Cell Physiology and/or related fields. The ICU invites applications for an assistant/associate/full professor, Ph.D, of animal physiology/cell physiology and/or related fields. Teaching includes animal physiology, foundation courses in biology, student laboratory courses, general education courses in biology for non-science majors, graduate school courses, and research with students. The ICU is a private, co-educational, bilingual, liberal arts university, based upon Christian principles. It was founded in 1949 by Christians in Japan and North America, and consists of six academic divisions and four graduate programs. There are about 2,800 students. Starting date: no later than April 2002. Send a letter of application, a complete curriculum vitae, list of publications, outline of your current research as well as your future plans, your vision of liberal arts education, and the names and addresses of three references, by February 28, 2001, to Prof. Hiroshi Suzuki, Chair, Division of Natural Sciences, ICU, 3-10-2, Mitaka-shi, Tokyo 181-8585, Japan, Fax: +81-422-33-1449. For further information and the CV format, please contact Prof. Haruko Kazama, Department of Biology, preferably by email: kazama@icu.ac.jp. Please visit web site: http://www.icu.ac.jp.

FACULTY POSITION IN MATERIALS BIOTECHNOLOGY

The MIT School of Engineering is continuing to build leading research and teaching programs in Bioengineering across a broad range of important new areas. Accordingly, the MIT Division of Bioengineering & Environmental Health (BEH) and Department of Materials Science & Engineering (DMSE) seek to jointly hire an outstanding junior or senior faculty member in the area of Materials Biotechnology, with a focus on engineering new materials based on biomolecular design principles. The successful candidate should hold a Doctoral degree in an appropriate discipline and have demonstrated evidence of leadership potential in research and teaching, combining expertise in biotechnology with a strong materials interest. Teaching efforts will be shared between BEH and DMSE, and research opportunities will be available in a variety of MIT laboratories and centers.

Applicants for this position should send a curriculum vitae and research/teaching summary, along with suggested references, to: Professor Anne M. Mayes, Chair, Search Committee, Attn: Materials Biotechnology Search, Department of Materials Science and Engineering, Rm 8-309, Massachusetts Institute of Technology, 77 Massachusetts Ave, Cambridge, MA 02139-4307.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

An Equal Opportunity/Affirmative Action Employer Non-Smoking Environment web.mit.edu/personnel/www



CAREER FAIRS hosted by Science

February 19, 2001 San Francisco Hilton and Towers San Francisco, CA From 11am -4pm Held in conjuction with the AAAS Annual Meeting www.sciencecareers.org

June 19, 2001 University of California, Irvine Irvine, CA www.sciencecareers.org

August 13, 2001 Seaport Hotel Boston, MA www.sciencecareers.org

Also at the Seaport Hotel ... Drug Discovery Technology 2001 held August 13-17, 2001 www.drugdisc.com

We also recommend attending these EVENTS sponsored by Science

March 29-30, 2001 Science Career Forum University of Chicago/ Northwestern University Chicago, IL http://caps.uchicago.edu/

April 19, 2001 Biotech Industry Day University of California, San Francisco San Francisco, CA http://saawww.ucsf.edu/ career/welcome.htm



POSITIONS OPEN

TENURE-TRACK FACULTY POSITION MARINE MAMMALOGY

The Department of Marine Biology, Texas A&M University of Galveston, invites applications for a tenure-track position in marine mammalogy commencing August 1, 2001. The Department seeks candidates from all areas of marine mammalogy including physiological ecology, population dynamics and modeling, behavioral ecology, and evolutionary biology. The successful candidate will be expected to contribute to undergraduate and graduate education and to develop an externally funded research program. Preference will be given to candidates with a strong research and publication record that demonstrates the application of modern approaches. The position will likely be filled at the ASSISTANT PROFESSOR level but applicants at higher ranks will also be considered. Ph.D. degree and evidence of excellence in research and teaching are required.

Application review will begin March 1, 2001, and will continue until the position is filled. Applicants should send curriculum vitae, statement of research and teaching interests, and names and addresses of four references to: Dr. Jay R. Rooker, Search Committee Chair, Department of Marine Biology, Texas A&M University, 5007 Avenue U, Galveston, TX 77551. TAMUG is a branch campus of Texas A&M University. Graduate appointments are through departments at Texas A&M University. For more information, please view the University's website: http://www.tamug.tamu.edu. Texas A&M University at Galveston is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

FACULTY POSITION EPIDEMIOLOGY

The Virginia–Maryland Regional College of Veterinary Medicine, Maryland campus, invites applications for a 12-month, tenure-track position in epidemiology. Minimum requirement: (1) Ph.D. or equivalent degree in epidemiology or related field; or (2) medical degree (D.V.M., M.D., etc.) with an advanced degree in epidemiology or related field. Candidates must be willing to participate in a multidisciplinary, problem-solving team approach to basic and applied research issues addressing food safety, host and pathogen ecology, and environmental factors in disease pathogenesis. Collaborative teams include academic, industry, and government professionals. Teaching responsibilities include lectures and clinical rotations and mentoring graduate and veterinary students. Rank will be at the level of **ASSISTANT/ ASSOCIATE PROFESSOR** and salary will be commensurate with qualifications.

Submit a letter of application, curriculum vitae, statement of career goals, and names and contact information of three references to: Chair, Epidemiology Search Committee, VA-MD Regional College of Veterinary Medicine, University of Maryland, 8075 Greenmeade Drive, College Park, MD 20742-3711. Closing date for this position is February 9, 2001.

The University of Maryland is an Affirmative Action/Equal Opportunity Employer.

Field biology and evolutionary ecology. Oberlin College Biology Department invites applications for **TENURE-TRACK POSITIONS** beginning fall 2001 in field biology and evolutionary ecology. Incumbent will teach lecture and laboratory courses in vertebrate field biology and evolutionary ecology, establish active research program in area of specialization, supervise undergraduate research projects, and participate in full faculty responsibilities. Requirements: Ph.D. in hand or by first semester 2001–2002; demonstrated interest and experience or potential excellence in undergraduate teaching. Postdoctoral experience desirable. Send letter of application; curriculum vitae; graduate transcripts; and three letters of reference to: Dr. Yolanda P. Cruz, Chairman, Biology, Oberlin College, Oberlin, OH 44074 by January 26, 2001. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

SCIENCE EDUCATION IN BIOLOGY EASTERN MICHIGAN UNIVERSITY

The Department of Biology invites applications for a tenure-track position in science education at the ASSISTANT PROFESSOR level beginning August 2001. EMU is the largest producer of educational personnel in the nation. We are seeking an individual with a minimum of a Master's degree in the biological sciences plus 18 graduate credits. The ideal candidate will have a Doctorate, successful K-12 classroom teaching experience, and demonstrated ability to teach at the college level. The position requires evidence of research in biology or science education. The successful candidate will have a major responsibility for implementing courses in methods of teaching biology (elementary and secondary); contributing to the professional development of teachers; carrying out an active, externally funded research program; interacting with science educators from other departments in a nationally recognized and award-winning science education program; and interacting with other faculty in the Biology Department and in the Col-lege of Education. The Biology Department has 22 faculty with graduate programs in ecology and organismal biology, cellular and molecular biology, and general biology. Submit a letter of interest, curriculum vitae, statement of teaching interests and philosophy, description of research interests, current reprints, transcripts (unofficial acceptable), and three letters of reference to: Posting Number F0155, Eastern Michigan University, 202 Bowen, Ypsi-lanti, MI 48197. Deadline for receipt of applications is February 14, 2001. For additional information, contact: Dr. Robert Neely, Department Head; Telephone: 734-487-4242; c-mail: bob.neely@ emich.edu; website: www.emich.edu/public/ biology/bioweb.htm.

RESEARCH SCIENTIST RADIATION ONCOLOGY

Northwestern University invites applications for a full-time position at the rank of **ASSOCIATE PRO-FESSOR** or **PROFESSOR**, tenure track, in the Department of Radiology, Section of Radiation Oncology. Applicants must have a Ph.D. and be a researcher established in the area of radiation biology, particularly those involved in molecular studies of radiation responses. Preference will be given to applicants with an active interest in the application of innovative molecular strategies to problems of cancer and radiation biology. Successful applicants will be expected to organize a program of radiation biology research to interact with Investigators in the Northwestern University's Robert H. Lurie Comprehensive Cancer Center, Children's Memorial Hospital, and Evanston Hospital and to teach radiological sciences to radiation oncology residents and medical students.

Please send curriculum vitae, a brief statement of research interest, and names of three references to:

Radiation Oncology Search Committee Ward 4-019 300 East Chicago Avenue Chicago, IL 60611 Telephone: 312-908-8216 E-mail: mss130@northwestern.edu

To ensure full consideration, applications must be received by March 1, 2001. Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States. Women and mimorities are encouraged to apply.

HARVARD IMMUNOGENE THERAPY

SENIOR FELLOW or junior faculty with background in cell manipulation, blood banking, and/or cellular immunotherapy for Director of cell transduction facility and to participate in basic and translational cancer gene therapy research program. Salary: \$50,000 to \$100,000. Contact: Dr. R. P. Junghans (FAX: 617-432-7007; e-mail: junghans@hms. harvard.edu) with résumé, research interests, names of three references.

5 JANUARY 2001 VOL 291 SCIENCE www.sciencemag.org

POSITIONS OPEN

ASSISTANT PROFESSOR POSITION

The Institute of Human Virology, University of Maryland Medical Biotechnology Institute, University of Maryland system, invites applications for a tenure-track faculty position at the ASSISTANT PRO-FESSOR level. Candidates with expertise in constructing and analyzing transgenic rats using trans-genes derived from HIV-1 or from the human CD4 gene. Desirable areas of demonstrable expertise include investigation of the effects of the HIV-1 transgene on immune functions and other cellular activities at the molecular level, making transgenic rats containing other HIV-1 constructs to determine which viral genes mediate the observed pathologies, and constructing human CD4 transgenic rats to try to obtain a small animal that can be infected with HIV-1. The successful candidate should have a record of success in constructing transgenic animals, especially rats, and should have veterinary experience. Some molecular biology experience is desirable.

Please send curriculum vitae, research interest statement, and names of three references to: Search Committee, F3-0104, Institute of Human Virology, Medical Biotechnology Research Facility, University System of Maryland, 725 West Lombard Street, Baltimore, MD 21201. Filing deadline for this position is January 31, 2001.

The University of Maryland Biotechnology Institute is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and candidates with disabilities are encouraged to apply.

PEDIATRIC PAIN RESEARCH

The Department of Anesthesiology at the College of Physicians and Surgeons of Columbia University invites applications for the position of **DIRECTOR OF PEDIATRIC PAIN RESEARCH**. The candidate should either be a Basic Scientist with a Ph.D. or a Physician Scientist with Board certification in both anesthesiology and pain management. Excellent laboratory facilities are available; the Director should have conducted pain research (basic or clinical, not necessarily pediatric) and demonstrated the ability to secure extramural funding, e.g., NIH. The Department has an NIH T32 training grant (basic science anesthesia training program) and, in addition, an accredited pain fellowship program. The candidate should have a first-tier track record in research and will join a well-established group of research-oriented academic anesthesiology faculty. The Department enoys excellent collaboration with basic science departments at Columbia. Candidates interested in this position should submit their curriculum vitae to:

> Margaret Wood, M.D., Chairman Department of Anesthesiology Columbia University 622 West 168th Street (PH505) New York, NY 10032 E-mail: mw218@columbia.edu

Columbia University is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR OF EDUCATIONAL ACTIVITIES American Astronomical Society

The Director of Educational Activities will have wide-ranging responsibilities for the educational programs of the AAS (see website: http://www. aas.org/education/LongRange.html). This position is funded at a full-time level and the incumbent is expected to work at the AAS Executive Office in Washington, D.C. The applicant must have a doctoral degree in astronomy or a closely related field, a strong interest in practical and theoretical issues in astronomy education, and a commitment to working on these issues. Further details regarding duties and qualifications as well as application instructions are available at website: http://www.aas.org/ JobRegister/no11702.html. The AAS is an Equal Opportunity Employer and encourages women and minority candidates to apply.

ALCON RESEARCH INSTITUTE 2000 AWARDEES



Constance L. Cepko, Ph.D. J. Donald M. Gass, M.D. Barry T. Rouse, D.V.M., Ph.D.

Gabriel H. Travis, M.D. Donald J. Zack, M.D., Ph.D.

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The Academic Community - Alcon Research Institute Working in Unison

Massachusetts Biologic Laboratories University of Massachusetts Medical School

Assistant Director of Vaccines

Massachusetts Biologic Laboratories has been producing vaccines and antibody products to prevent and treat human disease for more than 100 years. We are currently searching for an Assistant Director of Vaccines. The responsibilities include, but are not limited to, appyling scientific skills to vaccine process validation, GMP and process changes. The successful candidate will coordinate vaccines group for validation activities and improvements to manufacturing process. Responsible for interpreting data and writing reports for process validation and process changes. This position requires a Ph.D. in Microbiology, Biochemistry or Molecular Biology with 2-5 years' post-doctoral experience. The candidate should have interest in applied science and must possess excellent organizational and writing skills. Industry experience in GMP is preferred but is not required.

Post-Doctoral Associate

The Massachusetts Biologic Laboratory is recruiting a Research and Development Scientist to develop therapeutic monoclonal antibodies. The position will establish a research laboratory for isolation and development of therapeutic human monoclonal antibodies versus bacterial proteins. Candidates must have a Ph.D. and 2 years of relevant experience. Candidates should have excellent organizational and communication skills, work independently while contributing to a team effort. The successful candidate must have demonstrated research experience in infectious diseases and a strong background in cell culture methodology. Additional experience is desired in anaerobic microbiology, monoclonal antibody isolation or humanization and animal models of infectious disease. Applicants should send their CV to the following contact information:

Massachusetts Biologic Laboratories Carl Martin, Human Resources 305 South Street Jamaica Plain, MA 02130-3523 Email: martinsearch@hotmail.com Fax: 617-983-9081

O NATIONAL INSTITUTES OF HEALTH

Job Opportunities

The National Eye Institute Intramural Program at the NIH campus, Bethesda, MD., is seeking highly qualified Postdoctoral Fellows, Research Associates and Staff Scientists in the following areas:

- Molecular Biology
- Biochemistry
- Cell Biology
- Epidemiology
- Immunology
- Biostatistics
- Psychophysics
- Salaries range from \$29,000 to \$118,400 per annum, based on experience and type of appointment.

NEI offers an extensive benefits package that you may be eligible for, depending on the appointment mechanisms: Health Benefits, Life Insurance, Retirement Benefits, Annual and Sick Leave, Formal Training Program, Recruitment Bonus, Retention Allowance, Relocation Allowance, Loan Repayment Program, and Travel Benefits.

Candidates interested in specific job opportunities at the NEI may visit the NEI web site at http://www.nei.nih.gov/ listing the most current positions available.

NIH/NEI is an Equal Opportunity Employer

• Bio hysics

POSITIONS OPEN



Temple University School of Medicine

FACULTY POSITION IN NEUROVIROLOGY/NEUROSCIENCE Temple University Philadelphia, Pennsylvania

As part of a major expansion, the College of Science and Technology at Temple University invites applications for tenure-track faculty positions in the area of neurovirology/neuroscience. The faculty will be expected to conduct high-quality, funded research and to contribute to our educational mission at both the undergraduate and graduate levels. The level of academic appointment will be based on research and teaching experience. Applicants for ASSOCIATE PROFESSOR or PROFESSOR must have externally supported research programs and substantial publication record. Emphasis will be placed on the areas of molecular biology, genetics, and immunobiology of virus-induced CNS disease. Research focus in the area of viral pathogenesis including apoptosis, neuronal degeneration, and molecular tumorigenesis is preferred. Other relevant areas in neurobiology/neuroscience will also be considered. Applications should include curriculum vitae, publication list, and statements of research interests and teaching experience. Please include names, addresses, and telephone numbers of four references. Materials should be addressed to: Dr. Shohreh Amini, Chair, Neurovirology/ Neuroscience Search Committee, College of Sci-ence and Technology, Room 409 Barton Hall, Temple University, Philadelphia, PA 19122. Additional information can be found at websites: www. temple.edu/CNVCB or www.temple.edu/CST. Temple University is an Equal Opportunity/Affirmative Action Employer. Applications from women and members of underrepresented minorities are encouraged.

INSECT POPULATION GENETICIST DEPARTMENT OF ENTOMOLOGY University of Arkansas Fayetteville, Arkansas

Tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level. Successful applicant will develop an active, externally funded research program that complements existing departmental strengths and will be expected to contribute to graduate and undergraduate teaching programs. A Ph.D. in entomology, genetics, or related discipline is required with associated research experience. Applications will be accepted until February 1, 2001, or until a suitable candidate is found. To apply, send curriculum vitae; statement of research and teaching interests; copy of undergraduate and graduate transcripts; selected reprints; and the names, addresses, telephone numbers, and e-mail addresses of three references to: T. J. Kring, Department of Entomology, University of Arkansas, Fayetteville, AK 72701. Information about the Department can be found at website: http://www.uark.edu/depts/entomolo/index. html. The University of Arkansas is an Affirmative Action/ Equal Opportunity Employer.

OCEANIC EVOLUTIONARY BIOLOGIST: Institute of Marine and Coastal Sciences, Rutgers, The State University of New Jersey, invites applications for a **TENURE-TRACK POSITION** from candidates working on the genetic structure of populations, phylogeography, or on the use of genomics to study the evolution and ecology of oceanic ecosystems. The successful candidate will contribute to the undergraduate and graduate teaching programs in marine sciences and oceanography. Rank of the position is open.

Send curriculum vitae; statement of research interests; and the names of three references by February 28, 2001, to: Dr. J. Frederick Grassle, Institute of Marine and Coastal Sciences, Rutgers, The State University of New Jersey, 71 Dudley Road, New Brunswick, NJ 08901-8521. Rutgers is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR, TENURE TRACK CELLULAR AND MOLECULAR NEUROSCIENCE Brown University School of Medicine

As part of a significant expansion in the brain sciences at Brown University, the Department of Neuroscience seeks applications for a tenure-track position in cellular and molecular neuroscience to be filled at the ASSISTANT PROFESSOR level. The Ph.D. or M.D. degree and at least two years of postdoctoral training in these areas are required. Special consideration will be given to those studying synapse formation or plasticity with (1) expertise in high-resolution biological imaging (e.g., two-photon imaging) and/ or (2) molecular genetic techniques. The successful candidate will participate in undergraduate and graduate programs in neuroscience. For more information about neuroscience at Brown and this search, see websites: http://neuroscience.brown.edu/ and http://www.brainscience.brown.edu/

All applications received by February 1, 2001, will be given full consideration. Submit curriculum vitae, a set of representative reprints, a concise description of research interests and goals, and arrange for three letters of reference to be sent to:

> John P. Donoghue Department of Neuroscience Brown University Search Committee/S9 Box 1953

Providence, RI 02912

Brown University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS: medical microbiology and immunology. The Department of Medical Microbiology and Immunology, University of Wisconsin-Madison, invites applications for two tenure-track po-sitions at the **ASSISTANT PROFESSOR** level. One position is available in the area of viral pathogenesis of host-virus interactions. The second position is in the area of molecular/cellular immunology of infectious diseases or aspects of mucosal immunology. The anticipated starting date is July 1, 2001. Applicants must have a Ph.D. and/or M.D. and relevant postdoctoral experience. The successful candidates will be expected to develop independent research programs and participate in teaching at the undergraduate, graduate, and/ or medical student level. For more information, visit our departmental website: http://www.medmicro. wisc.edu/index/html. To apply, please send curric-ulum vitae; three letters of reference from persons knowledgeable of your research and/or teaching abilities; and a statement describing present and future research interests by February 16, 2001, to: Faculty Search Committee, c/o Heinritz, Medical Micro-biology and Immunology, 1300 University Ave-nue, Madison, WI 53706-1532. Unless confidentiality is requested in writing, information regarding the names of applicants must be released upon request. Finalists cannot be guaranteed confidentiality. University of Wisconsin–Madison is an Equal Opportunity/Affirmative Action Employer.

EXPERIMENTAL NEUROPATHOLOGIST

Huntington Medical Research Institutes (HMRI), a private research institute internationally recognized as innovators in neural prostheses, seeks a Ph.D. with a degree in neuropathology or a Neuroscientist with equivalent experience in evaluating morphologic changes in the nervous system using light and electron microscopy and immunohistochemical methodologies. The candidate must have a record of productivity to develop an extramurally funded program in his/her area of research. Candidates must be U.S. citizens or permanent residents. Contact: William F. Agnew, Ph.D., Huntington Medical Research Institutes, Neural Engineering Department, 734 Fairmount Avenue, Pasadena, CA 91105. Telephone: 626-397-5851; FAX: 626-397-5857; e-mail: agneww@hmri.org; website: www.hmri.org. Huntington Medical Research Institutes is an Affirmative Action/Equal Opportunity Employer.

ENVIRONMENTAL SCIENCE AND POLICY

The Goldman School of Public Policy and the Energy and Resources Group at University of California Berkeley seek a colleague for a joint appointment in the interdisciplinary area of science, technology, environment, resources, and public policy. The closing date is February 15, 2001. For details, see websites: http://gspp. berkeley.edu/and http://socrates.berkeley. edu/erg. Telephone: 510-642-4670.

FACULTY POSITION IN MICROBIOLOGY MICROBIAL ECOLOGY

The Department of Biology at Western Carolina University invites applications for a tenure-track AS-SISTANT PROFESSOR position. The candidate should hold a Ph.D. with postdoctoral experience. Applicants should have a strong background in microbiology with an emphasis in microbial ecology. Responsibilities include teaching microbiology and courses in the new liberal studies program. The candidate will be expected to maintain an externally funded research program involving undergraduates and Master's students. Please send curriculum vitae, a brief description of research interests and teaching philosophy, three letters of reference, and official transcripts of all undergraduate and graduate work to: Chair of the Search Committee, Department of Biology, Western Carolina University, Cullo-whee, NC 28723. Review of applications will begin on March 31, 2001, and will continue until the position is filled. Western Carolina University is an Affirmative Action/Equal Opportunity Employer.

A RESEARCH ASSISTANT PROFESSOR position in vascular biology is currently available to study microvascular changes following hemorrhagic shock and sepsis. Experience in vascular biology and/or leukocyte biology is essential. Experience using ex vivo or in vivo models to examine leukocyte-endothelial cell interactions and mechanisms of inflammation is desired. Our laboratory uses intravital microscopy and molecular and cellular biology techniques to examine changes in the mesenteric microcirculation following sepsis and hemorrhagic shock. Please send curriculum vitae and the names of three references to: Dr. Laurence Y. Cheung, M.D., University of Kansas Medical Center, Department of Surgery, 3901 Rainbow Boulevard, Kansas City, KS 66160. Email: lcheung@kumc.edu. The University of Kansas Medical Center is an Affirmative Aciton/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF NEURO-SCIENCE. Oberlin College Neuroscience Program seeks applications for a one-year, noncontinuing faculty position beginning fall 2001 to teach introductory and upper-level neuroscience courses and sponsor student research. Applicants with expertise in any area of neuroscience welcome. Molecular, Developmental, and Behavioral Neuroscientists are particularly encouraged to apply. Excellent opportunity to improve one's teaching credentials at premier liberal arts college. Send letters of application; curriculum vitae; graduate academic transcripts; and three letters of reference to: Michael Loose, Director, Neuroscience Program Search, Oberlin College, Oberlin, OH 44074 by January 31, 2001. Late applications may be accepted until position filled. Affimative Action/Equal Opportunity Employer.

ELECTROPHYSIOLOGIST GEORGETOWN UNIVERSITY

RESEARCH ASSOCIATE and ASSISTANT positions are available for research on cortical representation and coding of communication sounds in bats. Interested candidates should send their curriculum vitae and names of two references to: Jag Kanwal; e-mail: kanwalj@giccs.georgetown.edu; FAX: 202-687-0617. For more information, go to website: http://www.giccs.georgetown.edu/labs/ kanwal/index.html.
FIBROGEN is a private biotechnology

company focused on developing novel antifibrotic pharmaceutical and recombinant human/animal biomaterials. Additionally, FibroGen has unique programs focusing on the development of therapies to treat fibrosis, excessive scarring, tissue regeneration, and fibroproliferative disorders, including angiogenesis and squamous cell carcinoma. We currently offer the following opportunities:

Director of Cell Biology

Director of Cell Biology will lead an interdisciplinary research team dedicated to the discovery of novel therapeutic compounds involved in fibrotic diseases. The successful candidate will have extensive experience in the pharmaceutical/biotechnology industry in cellbased assay development. He or she will oversee a team of 15-20 scientists in the development of robust biochemical and cell-based assavs to be used to evaluate lead compounds. Key goals of the cell biology group will be development of medium- and high-throughput methods for screening and identification of lead compounds, development of secondary assays for characterization of lead compounds and preparation of "IND-ready" reports. The leader of this group will work together with heads of Molecular Biology, Pharmacology, Medicinal Chemistry and Immunology as well as project leaders of development-stage anti-fibrosis programs to establish a world-class cross-functional drug discovery effort aimed at treatment of fibrosis-related diseases. Qualifications: Ph.D. with 8+ years of post-graduate research experience, with proven expertise in cell- based drug discovery; demonstrated experience managing people and good communication and interpersonal skills; prior project management experience; prior experience in the development of high-throughput assays for use in the screening of lead compounds; and familiarity with extracellular matrix molecules, cell differentiation and growth factor signaling is desired. (Job Code: Sci107)

Scientists/Research Associate, Cell Biology (3 positions)

The successful candidates will design & implement cell-based assays to evaluate the biological activity of growth factors involved in fibrosis, adapt bioassays to a format appropriate for screening therapeutic agents, and perform cell culture (primary & established cell lines). These people will design, optimize and perform cell-based assays to evaluate reagents that affect the expression of extracellular matrix molecules, cell differentiation, and growth factor signaling. The Scientist positions require a Ph.D. in Biochemistry or Cell Biology and 3 years' postdoctoral experience (industrial experience preferred). The Research Associate position requires a BS/MS in Biochemistry or Cell Biology and 3+ years' experience. Both positions require relevant experience with cell-based assays; familiarity with the culture of various cell lines & the establishment of primary cell cultures; working knowledge of protein analysis techniques, including SDS-PAGE, Western analysis, and ELISA; hands-on experience working with radioactive & biohazardous materials; and PC proficiency with scientific software. Expertise with growth factor and connective tissue biology is desired. (Job Code: Sci135)

We offer a competitive compensation and benefits package, including stock options. If you thrive in a world of first class science, please send CV or resume (indicating job code of interest), to: **FibroGen Inc, Attn: HR Dept., 225 Gateway Blvd., South San Francisco, CA 94080; FAX: (650) 866-7204; Email (MS Word docs only please) hr@fibrogen.com.** EOE

For a listing of all our open positions, please visit our website at:

ENANTA Pharmaceuticals

ENANTA is a rapidly growing, well-funded drug discovery company. The Company's proprietary technology platform is based on a transportable and revolutionary capability of transforming peptides, natural products and drug molecules into novel therapeutics. We are currently searching motivated individuals in the following areas:

Director of Combinatorial Chemistry

Ph.D. in organic chemistry. Experience in solid phase combinatorial chemistry as well as excellent ability in synthetic organic chemistry required. 6+ years working experience in medicinal chemistry. Managerial experience required.

Director of Pharmacology

Candidates will be responsible for our new *in vivo* facility. Hands-on experience in pre-clinical testing in the area of anti-infectious therapeutics desirable. 6+ years of working experience in drug discovery and development. Managerial experience required.

Scientist Microbiology, Ph.D.

As a member of our drug screening group candidates will be responsible for MIC testing and genotyping of bacterial pathogens involved in infectious diseases. Experience in drug development and testing of clinical isolates would be desirable.

Scientist Biochemistry, Ph.D.

Candidates have hands-on experience in fermentation, protein expression in a variety of expression systems and protein purification. Experience in the quantitative analysis of protein-protein interactions, 2-D electrophoresis/ MS analysis would be desirable.

Scientists Medicinal Chemistry

Candidates have a Ph.D. or BS/MS in synthetic organic chemistry and experience in medicinal chemistry. Hands-on experience in drug discovery projects required.

ENANTA offers the excitement of a start-up company, employee stock options, a competitive salary and benefits package, and a highly interdisciplinary environment. To apply, please send a full CV including references by mail or e-mail to:

ENANTA Pharmaceuticals Job code: Science2000 750 Main Street, Cambridge, MA 02139 Fax: (617) 621-9574 e-mail: science2000@enanta.com

www.enanta.com ENANTA is an equal opportunity employer.

www.fibrogen.com

ANIMAL GENOMICS AND INFECTIOUS DISEASE

The U.S. Department of Agriculture, Agricultural Research Service, has an immediate opening (ARS– X0W–0470) for a permanent, full-time **RESEARCH SCIENTIST** to investigate the natural genetic variation that occurs in cattle genomes. Candidates with a broad background in either genetic, biochemical, molecular, cell, or microbial sciences are encouraged to apply. We seek exceptional individuals with the potential to study fundamental problems of infectious diseases in cattle from a population genetics perspective. The successful candidate will join an integrated, multidisciplinary team of Scientists identifying strategies to reduce the impact of pathogenic microorganisms of livestock.

A Ph.D. is desirable and U.S. citizenship is required. Starting salary is \$51,927 to \$80,279 per annum depending on experience, and starting dates are negotiable. Applications will be accepted until January 22, 2001, or until the position is filled. Detailed application information can be found at website: http:// www.ars.usda.gov/afm/hrd/resjobs/X0W-0470. HTM.

The position is in the Animal Health Research Unit (AHRÛ) at the U.S. Meat Animal Research Center (MARC), Clay Center, Nebraska (websites: http:// www.marc.usda.gov and http://visitnebraska. org). MARC is a 54-square-mile facility (35,000 acres) located in south central Nebraska that employs more than 70 permanent, full-time Scientists dedicated to developing new technologies for enhancing livestock production and increasing the quality of meat products. Genomic resources at MARC include arrayed EST, BAC, and YAC libraries; automated capillary-based DNA sequencing; high-throughput genotyping with MALDI-TOFMS; parallel expression profiling; integrated bioinformatics databases; large research herds (6,500 beef cattle; 3,000 sheep; and 700 sows); and state-of-the-art management facilities. AHRU is housed in a modern, well-equipped building with laboratories adjacent to the Great Plains Veterinary Educational Center. AHRU maintains strong, well-funded programs in infectious diseases, focusing on enteric and respiratory pathogens.

For research program information, prospective candidates may contact: Dr. Michael P. Heaton, USDA-ARS, U.S. Meat Animal Research Center, P.O. Box 166, State Spur 18D, Clay Center, NE 68933. Telephone: 402-762-4362; FAX: 402-762-4375; e-mail: heaton@email.marc.usda.gov. ARS is an Equal Opportunity Employer.

FORENSIC CHEMIST BIOCHEMIST/ANALYTICAL CHEMIST New Forensic Program

California State University, Fresno: Tenure-track position in the Department of Chemistry. A Ph.D. in biochemistry, analytical chemistry, or a closely related area and forensic experience are required. Responsibilities include teaching, research, and development of a new program in forensic chemistry with the State Crime Laboratory to be built on campus. Consult website: http://www.csufresno.edu/chem; e-mail: Dr. Howard Ono at howard_ono@csufresno.edu for application details. Receipt of application has been extended to February 8, 2001, for full consideration. CSUF is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST positions available in microbial pathogenesis to study anthrax pathogenesis and vaccine development. The program is focused on the identification and molecular characterization of microbial virulence determinants and their mechanisms of action using *in vitro* cell culture and animal models. Position requires Ph.D. and U.S. diizenship. Experience in cell and/or molecular biology, bioinformatics, and animal experimentation desirable. Interested applicants should send their curriculum vitae, statement of research interests, and names of three references to: Dr. Arthur M. Friedlander, U.S. Army Medical Research Institute of Infectious Diseases, 1425 Porter Street, Frederick, MD 21702. FAX: 301-619-2152; e-mail: arthur. friedlander@amedd.army.mil.





U.S. DEPARTMENT OF AGRICULTURE (USDA)

Agricultural Research Service (ARS) ASSOCIATE INSTITUTE DIRECTOR, GS– 15, Vacancy Announcement Number ARS–X1E-1045. Salary range: \$84,638 to \$110,028 per annum. Applications must be submitted by January 16, 2001.

Agricultural Research Service, Animal and Natural Resources Institute, Beltsville, Agricultural Research Service, Beltsville, Maryland, is accepting applications for the Associate Institute Director position. The mission of the Institute is to conduct research and technology transfer programs that ensure high-quality and safe food and other animal products while protecting the natural resource base and the environment. The mission is accomplished through fundamental and applied research in 13 laboratories and a Veterinary Services and Research Animal Services unit. The Associate Director participates with the Director in planning, coordinating, and evaluating the Institute's programs and provides leadership and operational accountability for the Institute's research and technology transfer programs. The position requires thorough knowledge of animal, natural resources, and/or environmental sciences; knowledge of budgetary processes and procedures; and managerial skills in establishing goals and priorities and in the assessment and assignment of human resources to accomplish goals. U.S. citizenship is required. For copy of vacancy announcement and/or forms, please Telephone: 301-504-1484; view Vacancy Announcement on Internet under website: http://www.ars.usda.gov/afm/ hrd/resjobs/X1E-1045.HTM. ARS/USDA is an Equal Opportunity Provider and Employer.

DIRECTOR OREGON INSTITUTE OF MARINE BIOLOGY University of Oregon

The University of Oregon's Institute of Marine Biology (OIMB) and the Department of Biology seek applications and nominations for Director of OIMB. The joint administrative and academic appointment is based at OIMB and will be at the TENURED SE-NIOR LEVEL in the Department of Biology. The Director reports to the Vice Provost of Research. The new Director must have a broad background in marine biology, demonstrated excellence in research and teaching, international academic recognition, and appropriate administrative experience. The appointee will be expected to lead an academic program for OIMB that will take advantage of local and regional marine habitats and organisms and will be strongly involved in programmatic development including undergraduate and graduate recruitment and teaching. Applicants should have demonstrated strengths in obtaining extramural research funding and be ready to lead funding efforts that will benefit OIMB. The new Director will also foster research interactions across the Biology Department in the broad areas of behavioral biology, cell biology, and evolutionary biology.

OIMB is located on the mouth of Coos Bay in Charleston, Oregon, in the midst of a diverse array of marine and estuarine habitats. The Institute is an ideal site for research and teaching and is well equipped with modern research laboratories, library, classrooms, dining hall, and accommodations (website: http://www.uoregon.edu/~oimb).

Applicants should submit curriculum vitae, statements of research, teaching and programmatic goals for the Institute, and three letters of recommendation to: **OIMB Director Search Committee, Department of Biology, University of Oregon, Eugene, OR 97403-1210**. The Search Committee will begin to review applications on February 20, 2001. The search will remain open until the position is filled.

The University of Oregon is an Equal Opportunity/Affirmative Action Institution committed to cultural diversity and compliance with the Americans With Disabilities Act.

POSITIONS OPEN

ENGINEER BIOCHEMICAL ENGINEER GROUP LEADER Biobased Chemicals

Argonne National Laboratory, one of the nation's premier energy/research and development organizations, located 20 miles southwest of the Loop in Chicago, Illinois, seeks a Biochemical Engineer for the Energy System Division. The individual in this position will serve as a Group Leader for the biobased chemical research activities within the Chemical and Biological Technology Section. The candidate will also be responsible for the interface with other ANL divisions, universities, laboratories, companies, and sponsors. This position requires considerable experience in biotech-related technologies including chemistry, molecular biology, and materials technology. This position also requires considerable skills in supervising, planning, scheduling, monitoring, project management, and problem solving. The candidate should possess strong skills in oral communication and preparation of written proposals, papers, and reports. Knowledge of safety procedures and environmental stewardship is also required. This level of knowledge and skill is usually achieved through the attainment of a Ph.D. degree in the biological sciences, chemistry, or chemical engineering fields supplemented by more than 10 years of related project experience. Ph.D. and more than 10 years of experience/equivalent; Master's degree and more than 12 years of experience/equivalent; Bachelor's degree and more than 15 years of experience/equivalent. Industry experience is desirable. Argonne provides an excellent compensation/benefits package. For prompt consideration, send a detailed résumé with cover letter and the names and addresses of three references to: T. A. Rodriquez, Box ES-300261, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. FAX: 630-252-9388; Telecommunications Device for the Deaf: 630-252-7722. For additional information, please refer to Argonne's website: http://www.anl.gov/ welcome.html. Argonne is an Equal Opportunity/Affirmative Action Employer

RESEARCH ASSISTANT II for health care and research center in northeast Ohio. Job duties: working under supervision and direction, research on the transcription factor AP-2, investigation of the mechanism of induction of oncogenacity by overexpression of AP-2, investigation of the mechanism of transcrip tional interference, identify and characterize tran scriptional coactivator that may be sequestered when AP-2 is overexpressed to relieve AP-2 transcriptional intertolerance; use breast cancer and ovary cancer cell lines to study the mechanism of tumorigenicity in the laboratory. Techniques used are Northern and Southern hybridization, recombinant DNA technology, Western blotting, double stable cell transfection, molecular DNA cloning, DNA sequencing, isolation and purification of proteins, isolation and purification of DNA and RNA, reporter assay, in situ hybridization, tissue culture techniques, immunochemistry, bacterial transformation, spectroscopy and spectrophotometric analysis, radioactive techniques, SDS-PAGE, site-directed mutagenesis, and anchorage-independent growth on soft agar. Analyze data utilizing computer programs and prepare results for publication by staff Scientists or others. Applicant must have B.S. in biochemistry or molecular biology or biology and one year in job duties or one year of experience in biochemical and/or molecular biology research including recombinant DNA technology, Northern and Southern hybridization, Western blotting, DNA cloning, bacterial transformation, DNA sequencing, isolation and purification of DNA and RNA, site directed mutagenesis, tissue culture techniques, PCR techniques, immunochemistry, SDS-PAGE, and analysis of data utilizing computer programs. 40 hours per week; 9 a.m. to 5 p.m., Monday through Friday; \$28,570 per year. Send two résumés and cover letters (no calls) to: ES Sp Prgms, REF # 6725jd, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.



INITIATIVE SPARKS INITIATIVE. Innovation works at Biogen. The creativity and ambition of our workplace sparks our teams to take responsibility, move on intelligent risks, and drive innovative decisions that are changing not only the science of medicine, but the lives of people with serious diseases. If you're ignited by taking initiative, you'll meet your match at Biogen.

NEUROSCIENTIST

We are seeking an innovative neuroscientist to lead efforts and/or participate in the identification and validation of new molecules relevant to neurological disorders, especially neurodegenerative diseases. You will use molecular and cellular techniques in conjunction with *in vivo* and/or *in vitro* models of disease to examine the function of candidate molecules. Requires a PhD in Neuroscience, Cellular Biology or Molecular Biology and background in neuroscience. Extensive experience with cellular neurobiology techniques is essential. Additional expertise with molecular biology techniques is preferred, as are team orientation and an ability to work under deadlines.

Foster your initiative and creativity at Blogen. We have one of the strongest financial profiles in the industry and our compensation and benefits package, including equity participation, is unmatched. For consideration, please forward your resume to: Biogen, Inc., Attn: Human Resources, Source Code: RC-A389-SCI, 14 Cambridge Center, Cambridge, MA 02142; Email: resumes@blogen.com (Source Code ONLY must appear in the subject line). Biogen is an Equal Opportunity Employer. No phone calls, please.



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CONFERENCES

Faculty Positions in Biomedical Engineering University of California, Los Angeles

The UCLA Biomedical Engineering Interdepartmental Graduate Degree Program (IDP) with the collaboration of faculties of the Schools of Engineering and Applied Science, Medicine and Dentistry and the Divisions of Life and Physical Sciences invites applications from highly qualified persons for tenure-track faculty positions in the School of Engineering and Applied Science at all levels. Candidates with a Ph.D. and/or M.D., D.D.S, D.V.M. degrees in biomedical engineering or related fields with three years experience after postdoctoral training, with demonstrated ability to attract peer reviewed funding, experience in teaching at the undergraduate and graduate level and excellence in their field are encouraged to apply. Joint appointments between the above mentioned academic units are possible depending on the candidate's qualifications. The IDP is particularly interested in candidates with experience in Tissue Engineering, Biomedical Optics, Signal and Image Processing, Biomechanics, Biomedical Instrumentation and Neuroengineering.

Applications including a curriculum vitae, names of at least 3 referees, teaching and research statements, and three to five selected reprints should be sent to:

Professor Warren Grundfest, Chair Biomedical Engineering IDP School of Engineering and Applied Science Box 951600 7523 Boelter Hall University of California, Los Angeles Los Angeles, CA 90095-1600 The University of California, Los Angeles is an

The University of California, Los Angeles is ar Equal Opportunity Employer.

Setting New Standards, Reaching New Goals in Cardiovascular Care

COR Therapeutics, Inc. is a publicly-held biopharmaceutical company focused on the discovery, development, and commercialization of novel therapeutics for the treatment and prevention of severe cardiovascular diseases. We currently have an excellent opportunity in our South San Francisco, CA facility for dedicated scientists to join our Biology department.

Scientist, Blood Coagulation Factors

You will be responsible for studies involving various inhibitors of blood coagulation, including carrying out independent research directed at delineating mechanisms of inhibition of coagulation factors in in vitro/in vivo systems. You will also collaborate with team members to identify and characterize specific modes/markers of thrombin generation to be used for monitoring the efficiency of anticoagulant therapy. Candidates must possess a Ph.D. in Biochemistry, Cell Biology, or Molecular Biology and at least 3 years of relevant post doctoral experience. Significant experience in mechanistic studies of blood coagulation factors and familiarity with animal models of thrombosis are required. (Job# A087-SCI)

Scientist/Senior Scientist, ADP Receptor

You will be responsible for the investigation of signaling pathways and structure function analyses of the recently cloned platelet Gi-coupled ADP (P2Y12) receptor (Nature, in press), as well as the analysis of P2Y12 knock-out animals. Candidates must possess a Ph.D., at least three years relevant post-doctoral experience, and experience in molecular pharmacology/biochemistry of G protein coupled receptors. A proven record of accomplishment, strong publication record, and excellent communication skills are required. Molecular & cell biology experience preferred. (Job# A086-SCI)

Scientist, Platelet Integrin Signaling

This position will elucidate mechanisms of platelet-mediated inflammation, and play a key role in the discovery of novel anti-inflammatory drug targets. Requires a Ph.D./MD in a biological science and relevant postdoctoral experience. A strong background in Cellular and Molecular Biology with experience using related biochemical techniques is essential. (Job# A066-SCI)

COR Therapeutics, Inc. offers competitive salaries, excellent benefits and attractive equity positions. To apply, please send resume to: COR Therapeutics, Inc., Attr: (Job #), 256 East Grand Avenue , South San Francisco, CA 94080; Fax: (650) 244-9287; or Email: hrœcorr.com. COR is an equal opportunity employer.



www.corr.com

Agricultural Research Service

The U.S. Department of Agriculture, Agricultural Research Service, Plant Sciences Institute, Bee Research Laboratory, in Beltsville, Maryland, is seeking applications for a Microbiologist, GS-0403-12/13. Salary is commensurate with experience (\$51,204 to \$79,155 per annum) plus benefits. Candidates must be U.S. atizens. The incumbent will be responsible for conducting research on the epidemiology and control of bacterial and/or viral diseases of honey bees. The specific objectives are to (1) characterize bacterial strains of foulbrood and determine factors related to pathogenicity, (2) investigate the pathogenicity of honey bee viruses and their mode of transmission as a means of estimating economic importance, and (3) examine the immunological responses of honey bees to microbial pathogens.

Candidates must request a copy of the vacancy announcement (ARS-X1E-1117) by either calling **Telephone: 301-504-1484** or by copying the full text announcement from the ARS homepage at **web**site: www.ars.usda.gov. Candidates must submit specific information as outlined in the vacancy announcement. Applications must be postmarked by the closing date of February 5, 2001. USDA/ARS is an Equal Opportunity Provider and Employer.

CLINICAL SCIENTIST (RESEARCH SCIENTIST SIX) New York State Department of Health

The Wadsworth Center of the New York State Department of Health is seeking a Clinical Laboratory Scientist to oversee the evaluation, certification, and regulation of clinical laboratories accepting specimens from residents of New York State as part of its clinical laboratory reference system. Responsibilities include the development and implementation of policy, validation and approval of standard laboratory methods and materials, and cooperative research relevant to system goals. In addition, the incumbent is responsible for overseeing the inspection of laboratory facilities, distribution of proficiency test specimens for laboratory examination, educational outreach activities, participation in development of regulations, and the promotion of effective relations with regulated parties as well as other state and federal agencies involved with laboratory approval and regulatory activities. The Candidate must have a doctoral degree and four or more years of professional experience related to a broad spectrum of clinical laboratory testing including research, development, and validation of assays. Quality assurance experience including the develop-ment and oversight of a quality improvement program in the clinical laboratory setting and proven leadership, management, and communication skills are essential. Anticipated salary range: \$92,000 to \$111,000 depending upon experience. Send résumé to: Human Resources Management Group, RS6/ 6TP/LCBU, Room 2276, Corning Tower Building, Empire State Plaza, Albany, NY 12237-0012 no later than January 29, 2001. An Affirmative Action/ Equal Opportunity Employer. Women, minorities, and people with disabilities are encouraged to apply.

FIELD ECOLOGIST. The Department of Biology invites applications for a one-year, noncontinuing position beginning July 1, 2001, in field ecology. Incumbent will teach lecture and laboratory courses in field or community ecology and organismal biology. Appointment at the rank of VISITING ASSIST-ANT PROFESSOR (Ph.D.) or VISITING IN-STRUCTOR (A.B.D.). Candidates should provide evidence of teaching excellence and scholarly potential and send statements of teaching and research interests, curriculum vitae, graduate transcripts, and three letters of reference to: Dr. Yolanda P. Cruz, Department of Biology, Oberlin College, Oberlin, OH 44074. Complete applications reviewed starting January 26, 2001. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DEVELOPMENTAL MOLECULAR BIOLOGIST/BIOCHEMIST

Cellular and Molecular Biology Division, Toronto Western Research Institute (TWRI), University Health Network (UHN). TWRI is a multidisciplinary research center affiliated with the University of Toronto located at the Toronto Western Hospital, UHN. It has strong basic research programs in neuroscience, vision, and immunology together with complementary clinical research programs. The Cellular and Molecular Biology Division is recruiting a Molecular Biologist/Biochemist to establish an independent, externally funded research program with a ocus in development and/or regeneration. The candidate will participate in the Vision Science Research Program (VSRP), but it is not essential that their current research be in this area. We seek an individual with a strong record of achievement, an exciting vision, and an interest in collaborative research. The successful candidate will be employed by the Institute at the Scientist level and will also hold an ASSIST-ANT PROFESSOR (status only) appointment at the University of Toronto. We seek an individual having a Ph.D. with a minimum of three years of postdoctoral expertise in molecular biology, biohemistry, and development. This is a permanent, full-time position. Please submit electronically a letter of application, curriculum vitae, a statement of research interests, and names/addresses of three references to: E. F. Stanley, Ph.D., Head, Cellular and Molecular Division, c/o Jeanny Lau, Research Coordinator, Toronto Western Research Institute. E-mail: jeannyl@uhnres.utoronto.ca. In accordance with Canadian law, priority will be given to qualified Canadian citizens and legal residents.

HEALTH SCIENCE SPECIALIST MEDICAL RESEARCH SERVICE U.S. Department of Veterans Affairs

Medical Research Service, Department of Veterans Affairs (VA) is recruiting for the position of Health Science Specialist in the Program Management Sec-tion located at VA Headquarters, Washington, D.C. The Health Sciences Specialist will be programmatically responsible for portfolio management and administration of VA research related to immunology, microbiology, or infectious diseases. Candidates must have a Ph.D. degree with a research background in a relevant area. Experience in grant writing and/or re-view is desirable. Position is a VA-excepted Schedule B appointment at the GS-13 level. Benefits package and limited relocation assistance available. Applications will only be accepted from U.S. citizens. Applicants should send recent curriculum vitae and a letter summarizing research and administrative experience to: Director, Medical Research Service (121E), VA Headquar-ters, 810 Vermont Avenue N.W., Washington, DC 20420. Applications will be accepted until Febuary 1, 2001. For further information, contact: Dr. Michael Cohen; Telephone: 202-408-3600; e-mail: michael.cohen@mail.va.gov. Equal Opportunity Employer.

RESEARCH ASSOCIATE for large-scale expression of protein tyrosine kinases for X-ray crystallagraphic structural studies in all aspects of Baculovirus/ insect cell expression systems; large-scale insect cell culture in spinner flasks, viral plaque assays, construction of recombinant baculovirus by cotransfection, viral amplification, and determination of virus titers; protein purification required by column chromatography and fine performance liquid chromatography (FPLC) to purify protein tyrosine kinases; mass spectrometry through preparation and analysis of purified protein to identify proteolytic fragments and tyrosine phosphorylation sites. Western blot analysis and recombinant DNA techniques also utilized. Mutiple positions available. Require M.S. in biology and one year of experience in job offered or a related occupation. Forty hour week; 9 a.m. to 5 p.m. \$26,023.92 per year. Submit two résumés to: Case #20000537, Labor Exchange Office, 19 Staniford Street, First Floor, Boston, MA 02114.

POSITIONS OPEN



MARINE PHYTOPLANKTON ECOLOGIST

The Department of Organismic Biology, Ecology, and Evolution (OBEE) and the campus-wide Insti-tute of the Environment (IoE) at UCLA invite applications for an open-rank, TENURE-TRACK, JOINT FACULTY POSITION in marine phytoplankton ecology. We seek an integrative Scientist who uses a variety of approaches to document and study the roles and significances of coastal and oceanic phytoplankton in relation to local and global material and energy cycles. The successful candidate's research program should include one or more of the following aspects of basic and applied science: collection and analysis of field data, laboratory experimentation, remote sensing techniques, and numerical modeling. Current faculty strengths are in marine biology, climatology, chemical ecology, watershed chemistry, physical oceanography, ocean biogeochemistry, and the ecology of pelagic and coastal wetlands environments, thus facilitating opportunities for multidisciplinary interactions in research and teaching.

The IoE (website: http://www.ioe.ucla.edu) is a campuswide academic unit that is devoted to interdisciplinary research and teaching related to environmental issues at local, regional, and global scales. OBEE (website: http://www.lifesci.ucla.edu/bio/) has 24 faculty whose research interests range from cellular to evolutionary biology. Candidates are expected to maintain a vigorous research program and to contribute to undergraduate and graduate teaching in both the IoE and OBEE. UCLA offers outstanding support to faculty, including access to extensive research and analytical facilities and generous start-up packages.

Please send curriculum vitae; statements of research and teaching interests; and names, addresses (including e-mail), and telephone numbers for three reterences by March 1, 2001, to: Chair, Marine Phytoplankton Ecologist Search, Department of Organismic Biology, Ecology, and Evolution, University of California, Box 951606, Los Angeles, CA 90095-1606. For more information, contact: Dr. Richard Zimmer, e-mail: z@biology.ucla.edu. The University of California is an Equal Opportunity Employer committed to excellence through diversity.

NEURODEGENERATIVE DISEASE RESEARCH

The Oregon Health Sciences University (OHSU) Center for Research on Occupational and Environmental Toxicology (CROET; website: http://www. croetweb.com) is expanding research into the causal basis of neurodegenerative disease, specifically the suspected interplay of environmental and genetic factors. Applications are invited for one or more FAC-ULTY POSITIONS to develop and sustain a vigorous, independent research program that incorporates a commitment to graduate and postdoctoral training. CROET is a multidisciplinary research institute that contributes to the rich community of basic and clinical Neuroscientists and Molecular Geneticists at OHSU. Applicants should send curriculum vitae; statement of research plans; and three letters of reference by January 30, 2001, to: Faculty Search, CROET, L606, OHSU, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201. OHSU is an Affirmative Action/Equal Opportunity Employer.

SENIOR SCIENTIST

AnaSpec, a biotechnology company, seeks a Senior Scientist to help develop custom antibody business. The candidate should have an M.S. and five years of experience on antibody production from peptide, basic antibody application knowledge, ELISA testing, polycolone, and others. Please forward résumé to: Human Resources, AnaSpec Inc., 2149F O'Toole Avenue, San Jose, CA 95131. FAX: 408-452-5059.

FUNDING OPPORTUNITY James S. McDonnell Foundation 21st Century Science Initiative-2001 Application Deadline: March 16 The James S. McDonnell Foundation announces new program descriptions and application guidelines for The 21st Century Science Initiative. Support is available for research in three topic areas-Brain Cancer; Bridging Brain, Mind, and Behavior; and Studying Complex Systems. The Foundation will support investigator-initiated research projects and multi-institutional collaborative projects. These programs are not intended to provide additional funding for ongoing research projects. Rather they are intend ed to encourage new ideas and approaches, early in their development, unlikely to be funded from traditional sources. **CONTACT INFORMATION:** Program information and guidelines for the James S. McDonnell Foundation can be found at: www.jsmf.org. Email may be directed inquiries tc info@jsmf.org. There are no geographic restrictions, international applications are encouraged. al Conference on Presented by... University of Massachusett Contaminated October Soils, 22-25, 2001 imen University of Massachusetts at Amherst 1 water 0 GENERAL TOPICS R · bioremediation · chemical analysis cleanup standard setting • environmental fate and

 state regulatory programs • sediments • UXOs Check Our Website for more info www.UMassSoils.com For further Information and abstract submission please contact Denise Leonard

modeling • hazard exposure and risk assessment hydrocarbon identification

· innovative technologies · jet fuel contamination

regulatory programs and policies

• site assessment/field sampling • soil chemistry

standard remedial technologies/corrective actions

· case studies on any of the above

· arsenic · chlorinated hydrocarbons, pesticides

(PCBs etc.) • containment • contamination at military installations • ecological risk assessments environmental forensics e heavy metals e MTBE

• mercury • phytoremediation • radionuclide

railroad sites • risk based cleanups (RBCA)

SPECIAL TOPICS

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Dept of Environmental Health Sciences N344 Morrill, University of Massachusetts Amherst, MA 01003 Phone: (413) 545-1239 • FAX: (413) 545-4692 dleonard@schoolph.umass.edu

Conference Co-Directors: Paul Kostecki, Ph.D. vard J. Calabrese, Ph.D. • Clifford Brull, Ph.D.

Jack Archer, J.D., LI.M. • Brian J. Rothschild, Ph.D.

The Ellison Medical Foundation Announces New Scientific Program: **Molecular Pathogenesis and Global Infectious Disease**

For the past three years, the Ellison Medical Foundation has been actively engaged in supporting research on the biology of aging. The Foundation is now pleased to announce the addition of another major program to its growing portfolio, namely Molecular Pathogenesis and Global Infectious Disease. As with the EMF-Aging project, EMF-GID will center on the most basic research on molecular and cellular mechanisms of disease, informed by the vision of how this can ameliorate some of humankind's most pressing problems. Special attention will be afforded to tuberculosis, malaria and parasitoses that account for much of the world's morbidity, and are grossly neglected in federally funded research in the U.S. Both projects will be overseen by a science advisory board comprised of Richard Sprott, Executive Director, Ellison Medical Foundation; Joshua Lederberg, Board Chairman, Rockefeller University (Nobel Prize 1958); Barry Bloom, Harvard School of Public Health; Eric Kandel, Columbia University (Nobel Prize 2000); Arnold Levine, Rockefeller University; George Martin, University of Washington; and Gerald Weissmann, NYU School of Medicine.

The principal vehicle of support will be the subvention of individual research scholars in the full range from graduate students to established investigators. The Oracle Corporation is already providing support for the **www.promedmail.org** web site which promotes rapid communication of information about new disease outbreaks among infectious disease specialists worldwide. For the present, awards will be mainly confined to U.S.- based institutions, but special attention will be given to encouraging collaborations with partner-institutions overseas offering the opportunity for exchange of students and training that merges laboratory skills and field experience. The Foundation, as in the past, will work closely with government agencies, international bodies and societies and other foundations with shared goals.

The following set of themes and sub themes is illustrative; the EMF-GID board welcomes suggestions from the scientific community about innovative conceptual approaches to meet the GID challenge.

- ~ Any fundamental studies on exotic microbes and diseases *
- ~ Our microbiome: natural microflora and pathogen ecology and evolution
- Therapeutic role of probiotics
- Diet, nutrition and immunity
- Implications of disease eradication
- Zoonoses: wildlife and human disease
- Comparative immunology
- Threats from newly explored habitats
- Host factors, human genomics and disease susceptibility
- Signaling and gene flow between parasites & hosts ~
 - ~ Parasite molecular mimicry
 - ~ Fever and other symptomatology
 - Plasmid and phage determinants of virulence
 - Phylogeny and ultimate origins of viruses
 - ~ New concepts for antivirals and antiparasitics
 - Nosocomial infection and sanitary precaution
 - Dyshygenic abuse of antibiotics and microbicides

*Investigations on model systems and familiar diseases are by no means precluded, but should be informed by a vision of their applicability to the global disease burden.

Details of application schedules and procedures will appear on the web site http:// www.ellison-med-fn.org by January 15, 2001. The first round of submission deadlines will begin in mid-March 2001. It is expected that the inauguration of the Molecular Pathogenesis and Global Infectious Disease Program will attract the caliber of basic researchers whose work holds great promise for scientific breakthroughs leading to amelioration of infectious disease worldwide.

For further information, contact:

Richard L. Sprott, Ph.D., Executive Director The Ellison Medical Foundation 4710 Bethesda Avenue, Suite 204 Bethesda, MD 20814 301/657-1830 or 2511 (phone) 301/657-1828 (FAX) Email: rsprott@emf.ipmail.att.net

PROTEOME INC.

Proteome is a rapidly growing company at the forefront of the bioinformation revolution that provides comprehensively curated protein databases to the pharmaceutical industry and to academia. All positions have the opportunity to advance to positions of greater responsibility in an exciting work environ-ment. SCIENTIFIC CURATORS: Multiple opportunities exist for Scientific Curators, who collect and integrate protein information for our multispecies databases. Candidates must have training in mammalian or model systems, a wide knowledge of cell biology or related fields, excellent writing skills, and a Ph.D. Curators may work full- or part-time, on-site or remotely, which offers maximum personal flexibility. PROJECT SCIENTISTS/SCIENTIFIC PRO-GRAMMERS: Multiple full-time opportunities exist on-site for Biological Scientists to become part of Proteome's research group. Candidates will develop new approaches and tools for gathering information for Proteome's integrated databases. Demonstrated ability to rapidly assimilate and apply new information is critical. Previous training in mammalian or model systems, excellent writing skills, or experience with a programming or scripting language (PERL, Python, Java, Javascript, C, C++, etc.) are preferred. Please send a cover letter and curriculum vitae in one form only to either: E-mail: hr@proteome.com or to Human Resources, Proteome Inc., 100 Cummings Center, Suite 435M, Beverly, MA 01915. See website: http://www.proteome.com for more information. An Equal Opportunity Employer.

PLANT SYSTEMATICS

The Department of Ecology, Evolution, and Natural Resources and of Plant Sciences at Cook College of Rutgers, The State University, are searching for a tenure-track ASSISTANT PROFESSOR beginning September 2001. The successful candidate is expected to establish a vigorous, externally funded research program in the field of plant systematics and evolution. Undergraduate teaching responsibilities will include a course in plant taxonomy and a course in the candidate's own specialty or participation in courses such as introduction to biology or general evolution. The candidate will also be involved in both graduate programs. The candidate should possess a Ph.D. in plant systematics with significant research experience. Experience in fieldwork and molecular techniques is desirable. We encourage collaborative research; our group in plant ecology and the molecular systematics of nonplant taxa is very active.

Send a letter of research and teaching interests; curriculum vitae; transcripts; and three letters of reference by January 22, 2001, to: Chair, Search Committee, Department of Ecology, Evolution, and Natural Resources, 14 College Farm Road, Cook Campus, Rutgers University, New Brunswick, NJ 08901-8551. Department descriptions can be found at: websites: http://www.rci.rutgers. edu/~deenr/ and http: //aesop.rutgers.edu/ www/departments/plantsci.html. Rutgers, The State University, is an Equal Opportunity/Affirmative Action Employer. We would particularly welcome applications from women and minority applicants.

COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS

An ASSOCIATE RESEARCH SCIENTIST position is available to study key problems of signal transduction and gene expression mechanisms underlying memory (*Cell* 89:115–126, 1997; *Neuron* 22:1– 10, 1999). The research program focuses on important and exciting questions of the molecular basis of learning and memory. Applicants must have a Ph.D. or M.D. and at least two years of postdoctoral research experience and expertise in molecular biological and biochemical techniques.

Submit curriculum vitae and names and e-mail addresses of three references to: Dr. James H. Schwartz, Center for Neurobiology and Behavior, 1051 Riverside Drive, New York, NY 10032. Email: mv20@columbia.edu; FAX: 212-543-6059. Columbia University takes Affirmative Action to ensure Equal Employment Opportunity.

POSITIONS OPEN

The United States Department of Agriculture, Cooperative State Research, Education, and Extension Service (CSREES), seeks qualified candidates for four positions with CSREES Integrated Programs including the Initiative for Future Agriculture and Food Systems (IFAFS) and the Integrated Research, Education, and Extension Competitive Grants Program (406). The purpose of IFAFS and 406 is to administer grants for high-priority research, education, and extension. Successful candidates will have training and/ or experience in biological or social sciences or agricultural engineering related to one or more of the following: genomics, biotechnology, food and nutrition, natural resources and precision agriculture, farm efficiency and profitability, water quality, pest management, or food safety. Candidates must be U.S. citizens. Available positions are as follows: (1) One **DIVISION DIRECTOR** (GS-15) re-

(1) One **DIVISION DIRECTOR** (GS-15) responsible for scientific and administrative leadership of Integrated Programs. Duties include developing and implementing programs, policies, and procedures for Integrated Programs; developing program descriptions and requests for proposals; budget accountability; administering and managing federal grants; and representing the Integrated Programs before major scientific and educational bodies. The incumbent will also provide direct administrative supervision of the Integrated Programs staff.

(2) Two **PROGRAM DIRECTORS** (GS-13/14) responsible for program leadership and policy implementation of specified programs within the Integrated area. Duties include management and oversight of the peer review process, postaward manage ment of funded projects, analyzing and evaluating program effectiveness, and liaison with the scientific community and other groups.

(3) One **ASSISTANT PROGRAM DIRECTOR** (GS-11/12) to assist with development and implementation of programs, policies, and procedures for IFAFS. The incumbent will also serve as an information source to applicants, grantees, and other groups about IFAFS goals, policies, and practices.

Closing date is February 5, 2001. Applicants are strongly encouraged to address the knowledge, skills, and abilities listed in the vacancy announcements. Contact: Dr. Sally Rockey; Telephone: 202-401-1761; e-mail: srockey@recusda.gov for more information. Application procedures and forms are available from: The Human Resources Division; Telephone: 202-720-6130; website: http://www. recusda.gov/hrd/vacancy.htm. USDA is an Equal Opportunity Employer.

NEUROBIOLOGIST JOB IDENTIFICATION NUMBER 11182 University of Illinois at Chicago

The Department of Biological Sciences at the University of Illinois at Chicago invites applications for a tenure-track position at the **RESEARCH ASSISTANT PROFESSOR** level. Applicant must possess a Ph.D. and several years of postdoctoral experience. We seek applications from individuals experienced in *C. elegans* neurobiology and skilled in molecular biology approaches. For fullest consideration, send curriculum vitae and three letters of recommendation by January 26, 2001, to:

Search Committee for Neurobiologist JOBID NUMBER 11182 c/o Mary Wais Laboratory of Integrative Neuroscience 4068 SEL-MC 067 840 West Taylor Street Chicago, IL 60607

UIC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/ASSOCIATE RESEARCH POSITION available in vascular biology involving macrophage lipid metabolism and apoptosis using both cell culture and macrophage-specific knockout mouse models (Cre-lox system). Experience in cell culture and molecular biology desirable. Send curriculum vitae and three references to: Dr. Ira Tabas, Division of Molecular Medicine, Columbia University, 630 West 168th Street, New York, NY 10032. E-mail: iat@ columbia.edu. Columbia is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

Two RESEARCH ASSOCIATE positions in neuroscience are available to study neurotransmitters and signal transduction pathways in the suprachiasmatic nucleus (SCN) of mice (Dr. Bult) and neuroprotection associated with hibernation in ground squirrels (Dr. Drew). This NIH-funded research (NS41069-01: NINDS, NIMH, and NCRR) is an integral part of the Alaskan Basic Neuroscience Program at the University of Alaska Fairbanks and is in collaboration with Dr. Rae Silver at Columbia University and Dr. Mark Smith at Case Western Reserve University. Experience with one or more of the following is required: fetal SCN transplants, body tem perature and activity telemetry, in vivo brain microdialysis and brain microinjections, HPLC, immunocy tochemistry, microscopy, and in vitro SCN explant and brain slice culture. One to two years of postdoctoral experience preferred. Please submit a cover letter; curriculum vitae; the first page of the UAF Employment Application (website: http://www.uaf.edu/ uafhr/pdf_files/employment_app_0998.pdf); and two letters of recommendation to be received on or before January 31, 2001, to: Institute of Arctic Biology, P.O. Box 757000, Irving I Building, Room 309, Fairbanks, AK 99775-7000, Attention: Marta Connor. Telephone: 907-474-6676; FAX: 907-474-7666. For more information, con tact: Abel Bult, Ph.D.; Telephone: 907-474-7158; e-mail: ffab@uaf.edu; website: http://mercury. bio.uaf.edu/~abult. faculty/bult_cv. html or Kelly Drew, Ph.D.; Telephone: 907-474-7190; e-mail: ffkld@uaf.edu. Positions with competitive salary and full benefits package are available immediately. The University of Alaska is an Affirmative Action Employer and Educational Institution.

MICROSCOPIST/CELL BIOLOGIST KRAFT FOODS, INC.

Kraft Foods, Inc. Research and Development, in Glenview, Illinois, is currently seeking a Microscopist/Cell Biologist to work in our Basic Science division. The selected individual will join a microstructure group studying the structure/function relationships inherent in diverse food systems, which include proteins, carbohydrates, and lipids. A team approach is used in conjunction with other physical chemistry disciplines to drive and support product and process development. Requirements include Ph.D. or equivalent background in cell biology or biochemistry with a proficiency in microscopy techniques including electron microscopy, fluorescence microscopy, and/or histochemistry. Current experience in image analysis and computer imaging would be considered favorable. Qualified applicants should send their résumé and salary history to: Kraft Foods Inc. Research and Development, 801 North Waukegan Road, Glenview, IL 60025. FAX: 847-646-7322. Visit our website: www.kraftfoods.com. Please format and send résumé in Microsoft Word document attachment to e-mail: erenk@kraft.com. Kraft is an Equal Opportunity Employer; Minorities/Females/Disabled/Veterans.

MOLECULAR PHARMACOLOGIST

The University of Hawaii, John A. Burns School of Medicine, is seeking a Molecular Pharmacologist to join a newly developed department of Molecular Pharmacology as well as to act as a "magnet" investigator for a Center of Clinical Research Excellence. The Investigator's role will be to establish a nationally recognized research program in the Department of Pediatrics, act as mentor and potential collaborator for pediatric faculty, and to contribute to the overall research agenda at the School of Medicine. Major areas of focus for the new Department of Molecular Pharmacology will include pharmacogenetics, infectious diseases, and/or neurobiology. Please direct inquiries to: David Easa, M.D., Pro-

Please direct inquiries to: David Easa, M.D., Program Director, Clinical Research Center, Kapiolani Medical Center for Women and Children, 1319 Punahou Street, Honolulu, Hawaii 96826. Telephone: 808-983-6233; FAX: 808-983-6240; e-mail: davide@kapiolani.org.

EUROPEAN OPPORTUNITIES

Founded in 1823, Birkbeck is based in Bioomsbury and has the highest proportion of research active staff of any college or university in the greater London area



Postdoctoral Research Assistant in Structural Molecular Biology of Membrane Proteins

(3-Year Fixed-term)

The School of Crystallography is seeking a Research Assistant, for appointment as soon as possible. You will work with Dr B A Wallace on a BBSRC-funded project: Circular Dichroism Spectroscopy: Membrane Protein Structure and Bioinformatics.

Applicants should have a PhD in Biophysics, Biochemistry, Chemistry, Biology or a related, relevant field and familiarity with computing. Experience in spectroscopy would be preferred, but is not essential.

Starting salary: £20,865 pa inc.

Closing date: 31 January 2001.

For further details please see http://www.bbk.ac.uk or send an (A4) sae, to the Personnel Department (Ref: ACR350), Birkbeck, Malet Street, Bloomsbury, London WC1E 7HX.

GLOBAL OPPORTUNITIES

Postdoctoral Fellow, Assistant Professor, Associate Professor Doctorate Students (scholarship available) in the fields of Metabolic Engineering, Analytic Chemistry, Bioinformatics and Computer Simulation.

Keio University, one of the top-ranked universities in Japan, will open a new international research institute at a new campus in Tsuruoka City (a northern city of Japan) in April 2001. The Institute for Advanced Biosciences consists of three international centers: the **Center for Metabolome Research**, the **Center for Bioinformatics**, and the **Center for Genome Engineering.** These innovative research centers will focus on biosciences of the 21st century, including proteomics, transcriptomics, metabolomics, and genome engineering, with a strong coupling with Bioinformatics such as genome informatics, cell modeling, biological simulation, and computational *(in silico)* biology.

Visit our website: http://www.bioinfo.sfc.keio.ac.jp/IAB For more information, contact Ms. Harue Ishihara (harue@sfc.keio.ac.jp).

GLOBAL OPPORTUNITIES



NATIONAL UNIVERSITY of SINGAPORE FACULTY POSITIONS IN BIOENGINEERING

National University of Singapore has launched a multidisciplinary Bioengineering Initiative comprising new undergraduate and graduate curricula and new facilities for teaching and research. This initiative is supported by various research centers and laboratories already established at the University. The facilities in these centres and laboratories are hosted by the Faculties of Engineering, Medicine, Science, Dentistry and the School of Computing. They cover interdisciplinary fields ranging from biomaterials, tissue engineering, computational modelling, medical imaging, biofluid dynamics, cell biology, biosensors, bioMEMs, pharmaceutical engineering and controlled drug release. This initiative also draws support from the National University Hospital and other national research institutes such as the Johns Hopkins Singapore. Institute of Materials Research & Engineering, Institute of Molecular & Cell Biology, Kent Ridge Digital Laboratory, Institute of High Performance Computing and National University Medical Institutes, all of which are located within the University campus and have collaborations with renowned universities worldwide. This close proximity enhances the interdisciplinary culture in both research and teaching.

In this context, NUS invites applications for **tenure-track faculty appointments**. We are looking for outstanding faculty members in the following areas of **Bioengineering**:

- Biochemical Engineering
- Biofluids
- Biomaterials
- Biomechanics
- Biomedical Imaging
- Computational Biomedical Engineering
- Controlled Drug Release
- Biomolecular Engineering
 Nano/Micro Medical Sys
- Nano/Micro Medical Systems
- Tissue Engineering

Applicants should have a PhD in Bioengineering or related fields. Outstanding graduate students nearing completion of PhD, postdoctoral fellows and current faculty members are also invited to apply.

Faculty members are expected to teach undergraduate and graduate courses, supervise graduate students, and establish research programmes that generate external funding and win international recognition. Generous research grants are made available to all academic staff on a competitive basis.

Interested parties can submit their application. including a resume, research areas of interest and names of three referees to:

Director, Bioengineering Initiative c/o Faculty of Engineering National University of Singapore

ational University of Singapo

9, Engineering Drive 1

Singapore 117576 Fax : (65) 779-1459 Tel : (65) 874-4494 Email : mpelowpj@nus.edu.sg

Website: www.eng.nus.edu.sg/mpe/bioeng/bio.html

Visit our website at http://www.nus.edu.sg/NUSinfo/Appoint/ Bioeng.html for links to information on the Department, the University, terms and conditions of service, and the application form. Only shortlisted candidates will be notified.

POSTDOCTORAL RESEARCHER IDENTIFICATION NUMBER 20565

Pacific Cooperative Studies Unit, located in Madison, Wisconsin, at the National Wildlife Health Center. Duties: Primarily responsible for computer simulation model development, programming, testing, simulation, interpretation, and related activities for multidisciplinary research study evaluating the role of disease and biocomplexity on the Hawaiian forest bird ecosystem. Modeling work will incorporate a range of biological complexity that includes genetic variation, host and disease resistance and susceptibility, vector biology and disease transmission, host and vector populations, spatial heterogeneity, and abiotic factors. Other responsibilities include assisting Investigators with study design, analysis and interpretation of results, and integration of study findings with model-ing components. Working in close collaboration with other Project Investigators is essential. Requires Ph.D. in ecology, wildlife biology, zoology, biometrics, or related discipline. Education and knowledge in computer modeling, simulation studies, and biometric methods for ecological studies including GIS and spatial analysis. Education or knowledge of population biology, demographic analyses, and ecological complexity. Ability in oral and written communication and ability to work effectively as part of a research team. Inquiries: Dr. Michael Samuel; Telephone: 608-270-2441. Closing: January 31, 2001. Minimum salary: \$3,058 per month. Application requirements: Send cover letter (note I.D. Number 20565) with narrative on your qualifications for the position, résumé with salary history, the names and telephone numbers of three work-related references, and copy(ies) of diploma(s) and/or certificate(s) used to qualify for position to: Director of Human Resources, Research Corporation of the University of Hawaii, 2530 Dole Street, Sakamaki Hall D-100, Honolulu, HI 96822.

POSTDOCTORAL RESEARCH ASSOCIATE MOLECULAR IMMUNOLOGY

To conduct studies on genomewide DNA microarray analysis of gene expression in human T cell lymphomas and leukemias. A similar approach will be used to examine normal murine and human T lymphocytes exposed to immunoregulatory stimuli. Qualifications: must have Ph.D. or M.D. with experience in molecular biology (e.g., PCR technology) and cell culture technique with strong interest in the use of bioinformatics analysis software needed to support this investigation. Salary commensurate with experience. See website: www.ccny.cuny.edu/positions/. Send curriculum vitae; statement of carcer goals; and the names, addresses, and telephone numbers of three references by February 15, 2001, to: Professor Richard Coico, Chairman, Department of Microbiology and Immunology, CUNY Medical School/SBE Room J–920, The City College, CUNY, 138th Street and Convent Avenue, New York, NY 10031. An Affirmative Action/Equal Opportunity/Americans With Disabilities Act/IRCA Employer.

POSTDOCTORAL POSITIONS. TGF-B:receptor interactions and structure. Multiple positions are available to study TGF-\beta:receptor interactions. X-ray crystallography will be used to determine structures of TGF-B:receptor complexes. The energetics of the interaction will be mapped with directed mutagenesis and surface plasmon resonance (SPR), guided by structural studies of the complexes. SELEX will be used to develop aptamers that inhibit the interaction as part of a cancer therapeutics program. Training will be provided by an interdisciplinary team with expertise in the structural biology of TGF- β (A. Hinck), X-ray crystallography (P. J. Hart), protein-protein interactions and SPR (E. Lafer), and RNA technology (R. Sousa) in the Center for Biomolecular Structure at the University of Texas Health Science Center at San Antonio. Submit curriculum vitae with e-mail addresses of three references to e-mail: Lafer@UTHSCSA.edu. The University of Texas Health Sciences Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN



Temple University School of Medicine

POSTDOCTORAL RESEARCH ASSOCI-ATE. An NIH-funded Postdoctoral Research Associate position will become available on January 18, 2001, in the Department of Pathology and Laboratory Medicine to study signal transduction pathways associated with mechanisms of anticancer drug action. Candidate should have a Ph.D. and extensive experience in molecular biology techniques including PCR/RT-PCR, analysis of differential gene expression, blotting, cloning, DNA sequencing, transfection, analysis of recombinant protein expression/activity, and a working knowledge of in vitro cell culture. Please apply with your curriculum vitae, including names and telephone numbers of three references, to: Hemant Parekh, Ph.D., Department of Patholo-gy, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. FAX: 215-707-2781. Temple University is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.

PREDOCTORAL, POSTDOCTORAL, AND RESEARCH ASSOCIATE POSITIONS Department of Pharmacology University of Minnesota

The Department of Pharmacology, University of Minnesota Medical School, has Predoctoral and Postdoctoral openings in several fields. Our faculty members are well funded and direct strong interdisciplinary research programs. Areas of emphasis include (1) molecular biology, biochemistry, immunology, and neurobiology neurochemistry; (2) molecular cloning of receptors and signal transduction; (3) regulation of gene expression (also use of transgenic and gene-targeting technology); biochemical/molecular pharmacology; and cancer chemotherapy, immunopharmacology, drug metabolism enzymology, and antiviral drugs.

Interested applicants for Predoctoral positions should write to the Director of Graduate Studies for more information. Postdoctoral and Research Associate applicants should send curriculum vitae, statement of research interests, and names of three references to: Dr. Horace H. Loh, Professor and Head, Department of Pharmacology, University of Minnesota, 6-120 Jackson Hall, 321 Church Street S.E., Minneapolis, MN 55455. E-mail: lohxx001@ umm.edu; FAX: 612-625-8408; website: www. pharmacology.med.umn.edu.

The University of Minnesota is an Equal Opportunity Educator and Employer.

Highly intelligent, exceptionally competent individual with strong scientific (though not necessarily medical) background sought by prominent Manhattan family to research and coordinate family medical and health care issues on a full-time basis. Act as liaison with leading medical researchers and consultants in academia and industry, assuming top-level responsibility for all technical, financial, and administrative affairs but without direct responsibility for patient care. Ph.D. or M.D. a plus but not essential. Highly attractive compensation. Résumé and compensation history to: Box 98, 1200 New York Avenue, Room 911, Washington, DC 20005.

POSTDOCTORAL POSITION available immediately to investigate the structure and function of normal and mutant human recombinant propionyl CoA carboxylase. Experience in biochemical purification of proteins, molecular biology, and cell culture techniques is desirable. Send or e-mail curriculum vitae and names of three references to: Dr. Jan P. Kraus, Department of Pediatrics C-233, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. E-mail: jan.kraus@uchsc.edu. University of Colorado is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION TENNESSEE STATE UNIVERSITY

A Postdoctoral position is available immediately to study the role of dopamine receptors in methamphetamine sensitization. This research is being conducted in collaboration with a research group at Vanderbilt University Medical Center. The Postdoctoral Associate will join a group that includes a Predoctoral trainee and two undergraduate students. The **RESEARCH ASSOCIATE** will carry out assigned experiments, present results to laboratory group, carry out related research projects, participate in other group activities, and write manuscripts for publication.

Applicants should have a Ph.D. degree, and postdoctoral research experience in molecular biology is preferred. Experience in gene cloning, gene expression, in sim hybridization, and/or experience in animal behavioral studies is desired also. Computer literacy and excellent oral and written communication skills are required. Competitive salary and fringe benefits commensurate with experience. Interested individuals should send their curriculum vitae and three letters of reference to: Human Resources, Tennessee State University, 3500 John A. Merritt Boulevard, Nashville, TN 37209-1561. Telephone: 615-963-5281.

RESEARCH SPECIALIST. Stanley Korsmeyer seeks an experienced, motivated Scientist to work collaboratively with him and Postdoctoral Associates in exciting areas of cancer research pursuing the genetic and biochemical basis of programmed cell death using genetically engineered mouse models. Experience in transgenic mouse injection and/or ES cell manipulation desired. The principal role of the position is experimental with some supervisory coordination of laboratory functions. B.S./M.S. degree with a minimum of three years of experience in a research setting required. Send curriculum vitae to: Stanley Korsmeyer, M.D., Investigator, Howard Hughes Medical Institute, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. E-mail: stanley_korsmeyer@dfci.harvard.edu; FAX: 617-632-6401. Dana-Farber Cancer Institute is an Equal Opportunity/Affirmative Action Employer.

NIH-funded **POSTDOCTORAL POSITION** in molecular neuroscience available immediately to study transcription factors controlling the growth arrest and terminal differentiation of primary neurons and their progenitors. Approaches include transgenesis, use of viral expression vectors, and transcription factor analyses. Experience in molecular biology is important; experience in molecular neuroscience a preference. Send curriculum vitae and names of three references to: Dr. Daniel Kilpatrick, Neuroscience **Program and Molecular Physiology Department**, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655. Email: daniel.kilpatrick@umassmed.edu.

POSTDOCTORAL POSITION available to study protein trafficking in *Drosophila* (see *J. Biol. Chem.* **275**:1802, 2000 and **website:** http:// www.ent.iastate.edu/dept/faculty/bonningb/). A strong background in molecular biology/biochemistry required. *Drosophila* research experience advantageous. Send curriculum vitae and contact information for three letters of recommendition to: Dr. Bryony C. Bonning, Iowa State University, **418** Science II, Ames, IA 50011-3222. E-mail: bbonning@ iastate.edu. *Iowa State University is an Affirmative Action / Equal Opportunity Employer*.

POSTDOCTORAL POSITION available to study molecular mechanisms of tumor suppression by pVHL, implications of which include tumor angiogenesis, hypoxia-inducible gene expression, and renal and vascular development. Experience in molecular biology and/or histologic techniques preferred. Please send curriculum vitae and names of three references to: Dr. Herbert T. Cohen, Boston University School of Medicine, X535, 650 Albany Street, Boston, MA 02118. FAX: 617-638-7326; e-mail: htcohen@bu.edu.

At the crossroads between the life sciences and lifestyles



U NOVARTIS

The Novartis Transplantation-Research-Departement based in Basel is looking for an experienced

Experimental Immunologist

We are seeking a talented, strongly motivated Ph.D. with postdoc experience in the area of modulation of in vitro and in vivo immune responses and an established publication record in the field of models / mechanism of immune modulation.

Experience in cell culture technology and animals models of immune responses are expected and knowledge in FACS-analysis, bioassays, and some experience in molecular biology are highly desirable. Excellent communication skills in English, both written and verbal, are essential.

The candidate will head a research laboratory with technical staff and will collaborate in a multidisciplinary team dedicated to the discovery and profiling of new innovative immunosuppressive principles for the induction of immunological tolerance and the prevention of chronic rejection.

To apply, please send a full curriculum vitae including names and contact phone numbers / e-mail addresses of references to:

Novartis Pharma AG

Human Resources Attn. Mr. Ronny Haeny WSJ-210.1638 CH-4002 Basel, Switzerland



SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY. The Center for Fluorescence Spectroscopy at the University of Maryland School of Medicine is offering a short course on "Principles and Applications of Time-Resolved Fluorescence Spectroscopy" in Baltimore, Maryland, March 19-23, 2001. The course will cover basic and advanced topics in fluorometry, including time- and frequency-domain measurements, and Forster energy transfer. Advanced topics include chemical sensing, imaging, fiber optics, infrared fluorometry, two-photon excitation, instrumentation, confocal and multiphoton microscopy, protein fluorescence, DNA technology, high-throughput screening, metalligand probes, lanthanides, and immunoassays. Textbook, course materials, lunches, and refreshments will be provided. For further information, a schedule, and fees, please contact: Ms. Mary Rosenfeld or Professor J. R. Lakowicz at the CFS, Department of Biochemistry and Molecular Biology, 725 West Lombard Street, Baltimore, MD 21201. Tele-phone: 410-706-8409; FAX: 410-706-8408; email: cfs@cfs.umbi.umd.edu; website: http://cfs. umbi.umd.edu.

POSTDOCTORAL POSITION

An immediate opening is available at the University of Pennsylvania School of Medicine for a qualified **POSTDOCTORAL FELLOW** to work in the area of Fcy receptor signaling and trafficking. We seek a candidate with experience in protein chemistry and structural biology and with a strong interest in signal transduction. Experience in cellular and molecular biology is also desirable. Our state-of-the-art facility and our highly skilled and motivated group provide an environment conducive to development of skills and contribution to ongoing research. Please forward curriculum vitae to: Dr. Alan D. Schreiber, University of Pennsylvania School of Medicine, Department of Medicine, Hematology/Oncology Division, BRBII/III, 421 Curie Drive, Philadelphia, PA 19104. E-mail: schreiber@mail.med.upenn.edu.

POSTDOCTORAL FELLOWSHIP in molecular cardiovascular biology at University of California San Francisco/Cardiovascular Research Institute. Current projects focus on signaling/gene transcription governing cardiomyocyte proliferation and differentiation. Systems include stem cell and animal models. Applicants must have Ph.D. and/or M.D. and a strong background in molecular/cellular biology. Send curriculum vitae, research summary, and names of three references to: H. S. Bernstein, M.D., Ph.D., University of California, San Francisco, 513 Parnassus Ave., Box 0632, San Francisco, CA 94143. FAX: 415-476-3112; e-mail: hsbernstein@ pedcard.ucsf.edu; website: http://bernstein.ucsf. edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately for study of neuropeptide and cell-surface peptidase involvement in prostate cancer. NIH-funded laboratory investigating mechanisms of neutral endopeptidase antitumor effects and neuropeptide signaling. Desired qualifications include recent Ph.D. or M.D. and experience in molecular biology and signal transduction. See *Nature Med.* **4**:50, 1998; *J. Clin. Inv.* **106:**1399, 2000; *Cancer Res.* **60:**6590, 2000.

Please send curriculum vitae to: Dr. David Nanus, Weill Medical College of Cornell University, 525 East 68th Street, B–1519, New York, NY 10021. E-mail: dnanus@med.cornell.edu; FAX: 212-746-6645.

POSTDOCTORAL ASSOCIATE/FELLOW position available to study cellular and molecular mechanisms of renal electrolyte transport. Experience in molecular biology, cell biology, and/or renal physiology required. Potential for nontenure-track faculty position. Please send curriculum vitae and names and e-mail addresses of three references: Dr. Peter S. Aronson, Section of Nephrology, Yale School of Medicine, 333 Cedar Street, Box 208029, New Haven, CT 06520-8029. E-mail: peter.aronson@ yale.edu. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

NIH 2001 = $[OPPORTUNITY]^N$

Train at the bench, the bedside, or both. The NIH offers **POSTDOCTORAL** and **CLINICAL FELLOWSHIPS** as well as tenure-track positions.

For details, visit our website: www.training.nih.gov

NIH is dedicated to building a diverse community in its training and employment programs.

POSTDOCTORAL FELLOW HUMAN GENE THERAPY RESEARCH INSTITUTE

The Human Gene Therapy Research Institute (HGTRI) has available a Postdoctoral Fellow position for research in gene transfer systems and their application to the treatment and prevention of cancer.

Laboratory focus is on translational research with a long-term goal of improving gene transfer into humans. Backgrounds in virology, cancer biology, molecular biology, immunology, neurobiology, and microbiology will be considered. Position is available immediately.

HGTRI is a not-for-profit, academic research group primarily funded by the Central Iowa Health System of Des Moines. Laboratories provide state-ofthe-art equipment, animal facility, and adminstrative and technical support. You can learn more about HGTRI by visiting the website: www.hgtri.org. Applicants should submit curriculum vitae, an outline of current and future research interests, and three references to: Charles J. Link Jr., M.D., Director, Human Gene Therapy Research Institute, Iowa Health System, 1313 High Street, Suite 111, Des Moines, IA 50309. Equal Opportunity Employer/Affirmative Action/Minorities/Females/Disability/Veteran.

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Postdoctoral positions are available to study the molecular basis of neural development and neurodegeneration. Current investigations employ conditional gene expression and inactivation approaches in mice to address (1) the roles of presenilins and Notch signaling in neural development, (2) the involvement of presenilins in Alzheimer's disease, and (3) Notch signaling in the adult brain. In addition, we are developing mouse models of Parkinson's disease (PD) using recently identified pathogenic mutations in parkin and α -synuclein to investigate the pathogenic mech-anism of PD. Highly motivated Ph.D. or M.D./ Ph.D. candidates with substantial experience in developmental neurobiology, Drosophila or mouse genetics, microarray technology, or rodent behavioral paradigms are encouraged to apply. Send curriculum vi-tae, two recent reprints, and names of three references to: Dr. Jie Shen, Center for Neurologic Diseases, 77 Avenue Louis Pasteur, Boston, MA 02115. E-mail: jshen@rics.bwh.harvard.edu.

POSTDOCTORAL POSITION MOLECULAR MECHANISMS OF EUKARYOTIC TRANSCRIPTION Vanderbilt University Medical Center

Two Postdoctoral positions available to examine the role of TBP, the TATA box binding protein, and its associated protein factors in RNA polymerase IImediated transcription initiation using the baker's yeast Saccharomyces cerevisiae system. We currently utilize a combination of biochemical, genetic, and biophysical methods to study the regulation and interactions of these proteins with each other, DNA, and other transcription factors; details can be obtained at website: www.mc.vanderbilt.edu/vumcdept/mpb/ weil/weil_lab.html. Interested parties should send curriculum vitae and names of references to: Dr. Tony Weil, Department of Molecular Physiology and Biophysics, Vanderbilt University, School of Medicine, Nashville, TN 37232-0615. FAX: 615-322-7236. Vanderbilt University is an Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

Two POSTDOCTORAL POSITIONS are available in the area of molecular and cellular neuro-science. The focus of the laboratory is on the molecular mechanisms underlying Alzheimer's disease, the tauopathies, and Huntington's disease. The two available projects are in the areas of (1) elucidating the mechanisms by which mutations in the tau gene cause neurodegeneration (FTDP-17) and (2) determining why an expansion of the polyglutamine domain in huntingtin results in the death of specific neuronal populations in Huntington's disease. Candidates must have a recent Ph.D. in cell biology, biochemistry, neurobiology, or a related discipline; have pub-lished at least one first-author paper in an Englishlanguage journal; and have extensive experience in molecular and cell biology techniques. University of Alabama at Birmingham provides a dynamic research environment with outstanding core facilities and in-frastructure. In addition, UAB is one of the top 20 research institutions in the United States based on NIH funding. Birmingham is a cosmopolitan city where the cost of living is low. Salaries will be competitive and commensurate with experience. For consideration, please send curriculum vitae and contact information for three references to: Dr. Gail V. Johnson, Department of Psychiatry, SC1061, 1530 Third Avenue South, University of Alabama at Birmingham School of Medicine, Birmingham, AL 35294-0017. FAX: 205-934-3709; e-mail: gvwj@uab.edu.

A POSTDOCTORAL POSITION is available to study the role of transcription repressor BCL-6 in normal B cells and B cell lymphomas. BCL-6, a protooncogene originally cloned from frequent chromosomal translocations in lymphomas, plays important roles in regulating a number of important immune responses, yet the molecular mechanism underlying its function is poorly understood. Applications are sought from highly motivated individuals with strong background in molecular biology/biochemistry. Prior experience with in vitro and/or in vivo tumor models, B cell differentiation, or mouse genetics will be a plus but not essential. More information can be found at website: http://bcl6.aecom.yu.edu. To apply, please send curriculum vitae, a brief description of research interests, and contact information of three references to: Dr. B. Hilda Ye, Department of Cell Biology, 302C Chanin Building, 1300 Morris Park Avenue, Bronx, NY 10461. E-mail: hye@ aecom.yu.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION, University of Washington, to study the role of spinal interneurons in the control of movements in behaving, nonhuman primates. NIH-funded projects use neurophysiological, neuroanatomical, iontophoretic, and behavioral techniques to examine the modulation of spinal reflexes, the monoaminergic and inhibitory regulation of interneuron and motoneuron excitability, and the control of muscle activity by different populations of interneurons during normal, voluntary movements. Ph.D. and experience in neurophysiological recording required; experience with iontophoresis desirable but not necessary. Please send curriculum vitae, description of research interests, and the names of three references to: Steve I. Perlmutter, Department of Physiology and Biophysics, University of Washington, Box 357330, Seattle, WA 98195-7330. E-mail: perl@u.washington.edu. Affirmative Action/ Equal Opportunity Employer

POSTDOCTORAL POSITION in signal transduction in insulin-resistant diabetes mellitus and/or cancer is available immediately. Current research is focused on role of IRS-1 in protecting IR from tyrosine phosphatases and activation of a novel glucose uptake route by pervanadate. Candidate should have Ph.D., M.D., or M.D./Ph.D. and background in molecular biology. Résumé with names of three references should be sent to: Leonard Jarett, M.D., Distinguished Professor of Pathology and Laboratory Medicine, University of Pennsylvania, Philadelphia, PA 19104. E-mail: ljarett@hotmail.com.

ANNOUNCEMENTS



The World Anti-Doping Agency (WADA) promotes and coordinates, at the international level, the "fight" against doping in all its forms. Through this autonomous agency, the Olympic Movement and the Public Authorities have intensified their efforts to keep drugs out of sport.

WADA cooperates with intergovernmental organisations, governments, The International Olympic Committee (IOC), International Sports Federations, National Olympic Committees, and the athletes.

WADA consists of a Foundation Board, the Executive Committee and five committees (Ethics and Education; Finance and Administration; Health, Medical and Research; Legal; and Standards and Harmonisation) and the WADA administrational staff.

One major task of the Health, Medical and Research Committee is to identify relevant areas of research in the field of anti-doping and encourage research projects within the following three areas of priority:

- 1. Factors regulating and enhancing growth
- 2. Compounds enhancing the oxygen carrying capacity of the blood
- 3. Endogenous testosterone, testosterone precursors and metabolites, 19 nor-steroids and establishment of normal urinary levels of these and related compounds.

For this purpose, WADA has allocated USD 5.000.000 per year and invites applications by April 1st 2001 at the latest. There are no requirements to the format of the application, but it should include an outline of the project (max. 5 pages), a budget (short- and long-term with indication of other funding), information about the researchers (curriculum vitae), their home institution, and its resources. WADA is interested in long-term commitments. Further information can be obtained from the Chairman of the Committee (see below), the Secretary General of WADA, Harri Syväsalmi (e-mail: harri.syvasalmi@wada-ama.org), or Bengt Saltin (e-mail: cmrc@rh.dk.)

All submitted projects will be peer reviewed by external panels and the Health, Medical and Research Committee will make the final proposal to the WADA Executive Committee. A response on the application can be expected by August 2001.

Arne Ljungqvist Chairman of the Medical, Health and Research Committee World Anti-Doping Agency Avenue du Tribunal-Fédéral 34 1005 Lausanne Switzerland

EUROPEAN OPPORTUNITIES

Postdoctoral Positions in Theoretical Astrophysics

THE MAX-PLANCK-INSTITUTE FOR ASTRONOMY Koenigstuhl 17, D-69117 Heidelberg, Germany.

The theory group at the Max Planck Institute for Astronomy (MPIA) in Heidelberg is offering postdoctoral positions to highly motivated, outstanding researchers in theoretical astrophysics. Preference will be given to individuals with experience in numerical modeling of magneto-hydrodynamical and/or stellar dynamical processes who are interested in dark matter, galaxy formation and evolution, the dynamical evolution of the interstellar medium and the formation of stars and stellar clusters.

The successful candidate will be encouraged to independently carry out research programs in galactic and extragalactic astronomy and cosmology. The MPIA can offer excellent computing facilities on its local cluster of PCs and SUN workstations which are connected to a cluster of special purpose GRAPE-3 and GRAPE-5 hardware boards with additional guaranteed access of supercomputers (SGI Origin 2000, Parallel Cray T3E, Vector NEC SX5) at the center for supercomputing in Garching. The postdoctoral position includes sufficient funds for publications, travel, etc.

Further information on the science interests of the MPIA community can be found at http://www.mpia-hd.mpg.de. The appointment will be made for two years, with possible extension by one year.

Interested candidates should send application materials, including curriculum vitae and a brief statement of research interests. They should also arrange for three letters of recommendation to be sent. All material should be addressed to Dr. Andreas Burkert at the above address. All material should be received by 15th February 2001. The Max Planck Society is an equal opportunity employer and particularly encourages applications from women.



DIRECTOR International Institute for Applied Systems Analysis

The International Institute for Applied Systems Analysis (IIASA), located near Vienna, Austria, is seeking a scientist of international stature for the position of Director. The successful candidate will oversee and guide a diverse research program combining natural and social science to produce scientifically based policy guidance on issues related to global change. Candidates should combine a vision for IIASA with scientific excellence, management and diplomatic skills, and broad experience in interdisciplinary, international research and policy applications. The Director should be an effective and active advocate to expand participation and membership in IIASA. The Director supervises approximately 200 scientists and support staff from 30 countries.

IIASA is nongovernmental, sponsored by an international consortium of 16 National Member Organizations. Preference will be given to applicants who are nationals of IIASA member countries. Applicants should have excellent written and spoken English, the working language of the Institute. Women & members of minority groups are encouraged to apply.

The post is a 3-year position with the possibility of renewal. Salary commensurate with experience. Review of applications will begin on March 30, 2001. Submit letter of application, CV, bibliography, and contact information for three references, to:

Professor M.J. Mossakowski Chairman of the Nominating Committee IIASA — Schlossplatz 1 A-2361 Laxenburg Austria

For more information about IIASA and this position, visit our web site at http://www.iiasa.ac.at.

POSTDOCTORAL POSITIONS IN BIOCOMPLEXITY

The University of New Mexico, in collaboration with the Santa Fe Institute and Los Alamos National Laboratory, has received an NSF grant to support interdisciplinary research on scaling of biodiversity (see complexity website: http://algodones.unm. edu/%7Edrewa/Compf2000.htm and complexity grant downloadable pdf link at bottom of page). We seek applicants for **POSTDOCTORAL RE-SEARCH ASSOCIATES** with interests in biodiversity and scaling of ecological phenomena with respect to body size, space, and time and with training in biology, physics, mathematics, Earth sciences, or related areas. Submit letter of application and at least three letters of reference to e-mail: jhbrown@ unm.edu. Evaluation of applications will begin on February 15, 2001. Send hard copies of these materials, curriculum vitae, and (p)reprints to: Dr. J. H. Brown, Department of Biology, University of New Mexico, Albuquerque, NM 87131 U.S.A. UNM is an Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available in the Department of Pharmacology, The Brody School of Medicine of East Carolina University to study the roles of molecular motor proteins in mammalian spermatogenesis. The successful candidate should have a Ph.D. in pharmacology, biochemistry, molecular biology, or related discipline. Preference will be given to applicants experienced in protein analysis using 2 D-PAGE, advanced molecular biology techniques, and immunocytochemistry. The anticipated start date for this position is February 1, 2001. Please submit curriculum vitae and three letters of reference by Decem-ber 30, 2000, to: Dr. Ann O. Sperry, The Brody School of Medicine of East Carolina University, Department of Pharmacology, Greenville, NC 27858-4353. East Carolina University is an Affirmative Action/Equal Opportunity Employer and invites applications from women and minority scientists. Federal law requires proper documentation of identity and employability at the time of employment.

Southern Illinois University School of Medicine is seeking a **POSTDOCTORAL/RESEARCH IN-STRUCTOR** to work under the direction of **Mark Francis**, **M.D.**, Chief, Division of Rheumatology. This position will perform research investigations as well as assisting technicians, doctoral candidates, house officers, and collaborators. Minimum qualifications include a Ph.D. in one of the biological sciences. Experience with molecular biology highly desirable but not absolutely necessary. A good opportunity to develop independence in the laboratory. Send résumé and three names and addresses of references to: **Ms. Jan Baxter, Medical Services Administrator, SIU School of Medicine, P.O. Box 19636, Springfield, IL 62794-9636.** Closing date: April 1, 2001, or until filled

SIU-SM is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL SCHOLAR: Extracellular matrix control of expression, distribution, and function of gap junction proteins in lung epithelium. Stipend based on motivation and credentials. Submit curriculum vitae and names of three references to: D. Eugene Rannels, Ph.D., Department of Cellular and Molecular Physiology H166, Penn State University College of Medicine, 500 University Drive, Hershey, PA 17033. E-mail: grannels@psu.edu; FAX: 717-531-7667. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to study cardiac tissue-specific gene expression and the molecular mechanisms underlying various forms of heart disease. Please send your curriculum vitae to: Jeffery D. Molkentin, Ph.D., Children's Hospital, Division of Molecular Cardiology Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-5958; e-mail: jeff.molkentin@chmcc.org. Children's Hospital is an Affirmative Action/Equal Opportunity Institution.

POSITIONS OPEN

POSTDOCTORAL POSITION AT EMORY Intracellular Signaling

NIH-funded Postdoctoral position available to study the intracellular signaling initiated by the angiotensin II receptor (AT1), a seven-transmembrane receptor. Angiotensin II stimulates several different signaling pathways via protein tyrosane phosphorylation (*Nature* **375**:247–250, 1995; *JBC* **271**:10329–10333, 1996). This project is to understand how a seventransmembrane receptor leads to the activation of the JAK-STAT pathway in response to angiotensin II. In particular, ligand-mediated STAT nuclear translocation is an area of active study. The project will include technical analysis using protein biochemistry and molecular biology. The applicant should have a Ph.D. or M.D. with experience in molecular biology or intracellular signaling. Applicants will be interviewed at Emory. Reply by mail or FAX to:

Ken Bernstein, M.D. WMB 7107A, Department of Pathology Emory University Atlanta, GA 30322 FAX: 404-712-9625

Emory is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION at the Cardiovascular Institute and Research Center of the University of Pittsburgh. We are seeking candidates with experience in the area of gene transfer/molecular biology of cardiovascular disease to participate in NIHfunded preclinical gene transfer studies. Applicants should have Ph.D., M.D., or M.D./Ph.D. degrees and experience in molecular biology/biochemistry. Applicants with experience in gene transfer will be particularly competitive. In addition, *applicants must be* U.S. ditizens or permanent residents. Please send curriculum vitae and names of three references to: Arthur M. Feldman, M.D., Ph.D., Director, Cardiovascular Institute and Research Center, 200 Lothrop Street, S572 Scaife Hall, Pittsburgh, PA 15213. E-mail: feldmanam@msx.upmc.edu.

POSTDOCTORAL POSITIONS now open in cellular and molecular endocrinology to apply DNA microarray and genomics approaches together with traditional research technologies to investigate fundamental biological processes involving hormone/cytokine-activated JAK/STAT signaling and xenobioticactivated nuclear receptors in the control of liver cytochrome P450 gene expression (website: http:// bio.bu.edu/Faculty_Staff/djw.html). Recent Ph.D. in molecular biology, cell biology, or biochemistry is preferred. Flexible start date. Send curriculum vitae, summary of research experience, select publications, and names of references to: David. J. Waxman, Ph.D., Department of Biology, Boston University, 5 Cummington Street, Boston, MA 02215. E-mail: djw@bio.bu.edu.

POSTDOCTORAL POSITION G PROTEIN SIGNAL TRANSDUCTION Yale University

Projects include biochemical and molecular genetic analysis of G protein structure-function relationships (Mol. Pharmacol. 57:1081, 2000) and use of fluorescent G protein subunits and receptors to monitor signal transduction in vivo (J. Biology Chem., in press, 2000). Please send curriculum vitae, a statement of research interests, and the names of three references to: Dr. Catherine Berlot, Department of Cellular and Molecular Physiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520-8026. E-mail: catherine.berlot@yale.edu.

POSTDOCTORAL POSITIONS available immediately in Dr. John Baxter's laboratory at the University of California, San Francisco. Candidates will work closely with Dr. Fred Schaufele or Dr. Paul Webb in the area of nuclear receptor structure and function. Applications should be addressed to: Drs. F. Schaufele and P. Webb, Metabolic Research Unit, University of California, San Francisco, CA 94143-0540 U.S.A.

POSITIONS OPEN

A POSTDOCTORAL POSITION is available immediately to study the roles of complement activation and complement receptors (CD21 and CD35) in the normal immune response and autoimmune diseases. Projects in several mouse systems designed to characterize the roles of complement activation and receptors are available. Research approaches include molecular, cellular, structural, and transgenic methodologies. The training environment benefits from strong collaborative arrangements within the combined Immunology Program at University of Colorado Health Sciences Center, Barbara Davis Center for Diabetes, and the National Jewish Center for Immunology. A strong background in molecular structure-function, biochemistry, or cellular immunology is required. Please send curriculum vitae and the names of three references to: Dr. V. Michael Holers, Departments of Medicine and Immunology, Box B-115, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. An Equal Opportunity Employer.

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to study the molecular mechanisms involved in vitamin D receptor (VDR)-mediated gene expression and the role of nuclear receptor coactivators and other novel VDR-interactive proteins. Outstanding, highly motivated candidates with expertise in cell and molecular biology, protein expression, and transcriptional assays are highly desired. Applicants with recent Ph.D., M.D., or equivalent degrees should send their curriculum vitae and a list of three references to: Paul N. MacDonald, Ph.D., Department of Pharmacology, W334, Case Western Reserve University School of Medicine, 10900 Euclid Avenue, Cleveland, OH 44106. FAX: 216-368-3395; e-mail: pnm2@po.cwru.edu.

POSTDOCTORAL POSITION

The Laboratory of Neuropsychology at NIMH seeks a Postdoctoral Fellow to conduct research on the neural substrates of auditory and/or somatosensory perception and memory in monkeys. The work will involve application of PET imaging and 2-deoxyglucose autoradiographic techniques and neurobehavioral techniques, among others. Applicants must have a Ph.D. or M.D. degree and less than five years of postdoctoral experience. Send curriculum vitae and three references to: Dr. Mortimer Mishkin, Building 49, Room 1B80, 49 Convent Drive, Bethesda, MD 20892-4415. E-mail: mm@ln.nimh.nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study interferon signaling pathways and the regulation of chemokine receptor function. Studies will involve the analysis of the interactions of various 7-transmembrane receptors, including receptors for chemokines and opioids, to control HIV coreceptor activities. Curriculum vitae and names of three references to: Dr. Thomas J. Rogers, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. E-mail: rogerst@ astro.temple.edu. An Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available immediately to study function and regulation of Ca²⁺ channels and their role in Ca²⁺ signaling. The successful applicant will have an outstanding opportunity to interact with many experts in this field. Applicants must have experience in electrophysiology, including whole cell and single channel current recordings. Send curriculum vitae and three letters of reference to: Dr. Shmuel Muallem, The University of Texas Southwestern Medical Center at Dallas, Department of Physiology, 5323 Harry Hines Boulevard, Dallas, TX 75390-9040. E-mail: shmuel. muallem@utsouthwestern.edu. The University of Texas Southwestern Medical Center at Dallas is an Affiimative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION supported by NIH funding is available immediately to study the structure and function of the attachment and fusion glycoproteins of paramyxoviruses, with emphasis on the mechanism by which they cooperate to promote membrane fusion. See *Virology* **253**:43–54, 1999. Experience in molecular biology is desirable but not essential. Send curriculum vitae and a brief statement of research interests and goals to: Dr. Ron Iorio, Department of Molecular Genetics and Microbiology, University of Massachusetts Medical School, **55** Lake Avenue North, Worcester, MA 01655-0122. E-mail: ronald.iorio@umassmed.edu.

POSTDOCTORAL POSITIONS available immediately to study (1) the function of BRCA1 in the suppression of breast and ovarian cancers and (2) chromatin remodeling and regulation of nuclear events in yeast. Highly motivated individuals with experience in molecular biology and biochemistry are encouraged to apply. Send curriculum vitae and the names of three references to: Rong Li, Ph.D., Department of Biochemistry and Molecular Genetics, Health Sciences Center, University of Virginia, Charlottesville, VA 22908. E-mail: rl2t@ virginia.edu.

POSTDOCTORAL POSITION

Postdoctoral positions available to study the biomedical and molecular aspects of cell-cell and cellmatrix interactions and signal transduction in leukocytes. Strong background in molecular biology and intracellular signaling is a plus. Projects include identification and characterization of genes responsible for a novel leukocyte deficiency. Send curriculum vitae and three references to: Holland Laboratory, American Red Cross (HR/HL, 192), 15601 Crabbs Branch Way, Rockville, MD 20855. E-mail: MonicaH@usa.redcross.org. Equal Opportunity Employer; Minorities/Females/Disable/Veterans.

POSTDOCTORAL POSITION in field of genomic instability and cancer biology available immediately in the laboratory of **Dr. Gary Kupfer**, Department of Microbiology, University of Virginia School of Medicine. Molecular biology, protein biochemistry, or cell biology skills desired. Projects include Fanconi anemia protein purification, regulation and characterization of binding proteins, and mechanism of HTLV I leukemogenesis. Please send curriculum vitae and list of references to: **Gary Kupfer**, M.D., Box 441, Jordan Hall, University of Virginia, Charlottesville, VA 22908. E-mail: gk9e@virginia.edu.

POSTDOCTORAL POSITION STREPTOCOCCAL GENETICS/ PHYSIOLOGY

Postdoctoral position to study virulence traits in *Streptococcus mutans* with focus on protein transport via the Srp/Sat pathway. Ph.D. required. Experience in molecular biology and background in microbial physiology preferred. Send curriculum vitae to: Dr. Arnold Bleiweis, University of Florida, Department of Oral Biology, P.O. Box 100424, JHMHC, Gainesville, FL 32610.

POSTDOCTORAL POSITIONS available in Drosophila molecular genetics at Northwestern University, Chicago, Illinois. Arcas of interest (website: http://www.biochem.nwu.edu/ibis/research) (1) R. Allada; circadian rhythms, sleep, general anesthesia; (2) G. Beitel; organ morphogenesis; (3) R. Holmgren; cell fate determination, hedgehog signaling. Send curriculum vitae, references, and laboratory of interest to: Dr. R. Allada, Northwestern University, 2153 Campus Drive, Hogan 2-160, Evanston, IL 60208. E-mail: r-allada@northwestern. edu.

POSTDOCTORAL POSITIONS available in the LMV, Center for Biologics Evaluation and Research, Food and Drug Administration, on the NIH campus for research on molecular biology and immunology of HIV and HTLV. Backgrounds in immunology, virology, molecular biology, and infectious disease are appropriate. Contact: Andrew Dayton, Ursula Utz, and Linna Ding, HFM-315, 1401 Rockville Pike, Rockville, MD 20852-1448.

POSITIONS OPEN

POSTDOCTORAL POSITIONS immediately available to study the function of PTEN/PI3K/Akt (PKB) signaling pathway in cancer and apoptosis employing knockout and transgenic mice of the three Akt isoforms. Experience in mouse genetics, pathology, and development is required. Curriculum vitae and three recommendation letters should be sent to: Nissim Hay, Department of Molecular Genetics (M/C 669), The University of Illinois at Chicago, Chicago, IL 60607. FAX: 312-355-2032; e-mail: nhay@uic.edu.



VOLUNTEERS NEEDED!

Recording for the Blind & Dyslexic, the largest producer of recorded educational books for blind, visually impaired, and learning disabled individuals, is in need of volunteers to produce textbooks for RFB&D's master library.

RFB&D's collection of educational titles is the largest and most unique resource of its kind in the world. For over 50 years, people with print disabilities have used this extraordinary service to help fulfill their educational, professional, and personal goals.

Currently, RFB&D is facing a shortage of specialized readers proficient in mathematics, science, finance, accounting, computer science, and other technical areas. We are in need of volunteers with backgrounds in these fields to help RFB&D record books to meet the ever-increasing demand from students and professionals for materials in these subject areas.

RFB&D is a national nonprofit organization with headquarters in Princeton, New Jersey, and 32 recording locations nationwide. For more information about volunteer opportunities with RFB&D and studio locations nearest you, please Telephone: 1-800-803-7201 or visit our website: www.rfbd.org.

INTERNSHIPS NASA PLANETARY BIOLOGY

The Marine Biological Laboratory, Woods Hole, Massachusetts, invites applications from graduate students and seniors accepted to graduate programs for internships to explore scientific questions of global scale about the planet Earth. Interns will receive awards of \$2,200 plus travel to participate in research at NASA centers and collaborating institutions for approximately eight weeks. Typical intern programs include global ecology, remote sensing, microbial ecology, biomineralization, and origin and early evolution of life. Application deadline: March 1, 2001. For information/applications, contact: Michael Dolan, Planetary Biology Internship, Department of Geosciences, Box 35820, University of Massachusetts, Amherst, MA 01003-5820. E-mail: pbi@geo.umass.edu. Telephone: 413-545-3223.

An Equal Opportunity/Affirmative Action Institution.

RESEARCH GRANTS

As part of its continuing efforts to encourage the utilization of alternatives to traditional uses of laboratory animals in basic research, testing, and education, the Alternatives Research and Development Foundation is soliciting research proposals to develop such methods. Funding of up to \$40,000 each is available to support individual projects at U.S. universities and research institutions. Applications from non-U.S. institutions or Investigators may be considered on a case-by-case basis. Deadline for applications is 30 April 2001 with recipients announced on 15 July 2001. For further information and application instructions, contact: The Alternatives Research and Development Foundation, 14280 Golf View Drive, Eden Prairie, MN 55346-3000. FAX: 952-949-2619; e-mail: ardfjmc@aol.com. (No telephone calls, please.)

POSITIONS OPEN

POSTDOCTORAL FELLOW

The Section of Bone Marrow Transplant at Rush Medical College is seeking a Postdoctoral Fellow to participate in applied research projects in areas directly relating to stem cell transplantation. Projects include the engineering of natural killer cells to better recognize and kill malignant cells.

Requirements: Ph.D. with two to three years of experience in a research laboratory. Experience in molecular biology/immunology.

Interested applicants should forward curriculum vitae to: Hans-G. Klingemann, M.D., Ph.D., Section of Bone Marrow Transplant and Cell Therapy, Rush Presbyterian St. Luke's Medical Center, Suite 404, Kidston Building, Chicago, IL 60612. E-mail: hklingem@rush.edu.

POSTDOCTORAL POSITION available immediately to study genomewide gene expression in leukemia (*PNAS* 95:11909–11914, 1998; *PNAS* 97: 349–353, 2000; *PNAS* 97:4162–4167, 2000). Candidates with experiences in gene expression are encouraged to apply. Send curriculum vitae and names of three references to: Dr. San Ming Wang, Janet Rowley Laboratory, Hematology/Oncology, University of Chicago Medical Center, 5841 South Maryland Avenue, MC2115, Chicago, IL 60637. Telephone: 773-702-6788; FAX: 773-702-3002; e-mail: swangl@midway.uchicago.edu.



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- Ref: I. Lennon, G., Auffray, C., Polymeropoulos, M., Soares M.B. (1996) Genomics 33, 151-152.
 - 2. http://www.ncbi.nlm.nih.gov/UniGene/index.html
 - 3. http://ratEST.uiowa.edu

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